

# PARK Reference Manual

1.0

Generated by Doxygen 1.5.2

Tue Oct 9 15:37:38 2007



# Contents

<b>1</b>	<b>PARK Hierarchical Index</b>	<b>1</b>
1.1	PARK Class Hierarchy . . . . .	1
<b>2</b>	<b>PARK Class Index</b>	<b>7</b>
2.1	PARK Class List . . . . .	7
<b>3</b>	<b>PARK Class Documentation</b>	<b>13</b>
3.1	servers::queueAbstract::AbstractQueue Class Reference . . . . .	13
3.2	servers::archiveSys::ArchiveSystem Class Reference . . . . .	15
3.3	parkAui::plot::auiContainer::AuiContainer Class Reference . . . . .	16
3.4	parkAui::plot::auiPanel::AuiPanel Class Reference . . . . .	17
3.5	servers::cluster::Cluster Class Reference . . . . .	18
3.6	servers::cluster::ClusterController Class Reference . . . . .	20
3.7	servers::cluster::ClusterNode Class Reference . . . . .	22
3.8	servers::cluster::ClusterService Class Reference . . . . .	23
3.9	parkAui::common::fittingConstrain::ConstrainParameter Class Reference . . . . .	24
3.10	parkAui::common::fittingConstrain1::ConstrainParameter Class Reference . . . . .	25
3.11	parkAui::common::fittingConstrain3::ConstrainParameter Class Reference . . . . .	27
3.12	parkAui::common::fittingConstrain::ConstrainTable Class Reference . . . . .	29
3.13	parkAui::common::fittingConstrain1::ConstrainTable Class Reference . . . . .	30
3.14	parkAui::common::fittingConstrain2::ConstrainTable Class Reference . . . . .	31
3.15	parkAui::common::fittingConstrain3::ConstrainTable Class Reference . . . . .	32
3.16	parkAui::common::fittingConstrainTable::ConstrainTable Class Reference . . . . .	33
3.17	servers::queueFifo::FifoQueue Class Reference . . . . .	34
3.18	parkAui::common::fittingBuilder0::FittingBuilder Class Reference . . . . .	36
3.19	parkAui::common::overviewFitting::FittingBuilder Class Reference . . . . .	37
3.20	parkAui::common::overviewModelDataset::FittingBuilder Class Reference . . . . .	38
3.21	parkAui::common::fittingBuilder::FittingBuilder Class Reference . . . . .	39
3.22	parkAui::common::fittingConstrain::FittingConstrain Class Reference . . . . .	40

3.23	parkAui::common::fittingConstrain0::FittingConstrain Class Reference . . . . .	41
3.24	parkAui::common::fittingConstrain1::FittingConstrain Class Reference . . . . .	42
3.25	parkAui::common::fittingConstrain2::FittingConstrain Class Reference . . . . .	43
3.26	parkAui::common::fittingConstrain3::FittingConstrain Class Reference . . . . .	44
3.27	parkAui::common::fittingConstrain::FittingConstrainGrid Class Reference . . . . .	45
3.28	parkAui::common::fittingConstrain0::FittingConstrainGrid Class Reference . . . . .	46
3.29	parkAui::common::fittingConstrain1::FittingConstrainGrid Class Reference . . . . .	47
3.30	parkAui::common::fittingConstrain2::FittingConstrainGrid Class Reference . . . . .	48
3.31	parkAui::common::fittingConstrain3::FittingConstrainGrid Class Reference . . . . .	49
3.32	parkAui::common::fittingDatasetDataPanel::FittingDatasetDataPanel Class Reference . . . . .	50
3.33	parkAui::common::fittingDatasetEditor::FittingDatasetEditor Class Reference . . . . .	51
3.34	parkAui::common::fittingDatasetMetaPanel::FittingDatasetMetaPanel Class Reference . . . . .	52
3.35	parkAui::common::fittingDatasetPanel::FittingDatasetPanel Class Reference . . . . .	53
3.36	parkAui::common::fittingDatasetPanel0::FittingDatasetPanel0 Class Reference . . . . .	54
3.37	parkAui::common::fittingDatasetPanel1::FittingDatasetPanel1 Class Reference . . . . .	55
3.38	parkAui::common::fittingOverview::FittingOverview Class Reference . . . . .	56
3.39	parkAui::common::fittingOverview0::FittingOverview Class Reference . . . . .	57
3.40	parkAui::common::fittingPanel::FittingPanel Class Reference . . . . .	58
3.41	parkAui::common::fittingParameter::FittingParameterPanel Class Reference . . . . .	59
3.42	parkAui::common::fittingParameter::FittingParameterTable Class Reference . . . . .	60
3.43	parkAui::common::fittingResidual::FittingResidual Class Reference . . . . .	61
3.44	parkAui::common::fittingResidual1D::FittingResidual1D Class Reference . . . . .	62
3.45	parkAui::common::fittingViewer::FittingViewer Class Reference . . . . .	63
3.46	parkAui::common::fittingViewer1D::FittingViewer1D Class Reference . . . . .	64
3.47	parkAui::builder::gauss::gaussData::GaussData Class Reference . . . . .	65
3.48	parkAui::builder::gauss::gaussDataset::GaussDataset Class Reference . . . . .	66
3.49	parkAui::builder::gauss::gaussDatasetDataPanel::GaussDatasetDataPanel Class Reference . . . . .	67
3.50	parkAui::builder::gauss::gaussDatasetDataPanelP::GaussDatasetDataPanel Class Reference . . . . .	68
3.51	parkAui::builder::gauss::gDatasetPanel::GaussDatasetPanel Class Reference . . . . .	69
3.52	parkAui::builder::gauss::gaussDatasetViewer::GaussDatasetViewer Class Reference . . . . .	70
3.53	parkAui::builder::gauss::gaussDataset::GaussDataSource Class Reference . . . . .	71
3.54	parkAui::builder::gauss::gaussData::GaussInstrumentData Class Reference . . . . .	72
3.55	parkAui::builder::gauss::gaussTheory::GaussParameter Class Reference . . . . .	73
3.56	parkAui::builder::gauss::gaussTheory::GaussTheory Class Reference . . . . .	74

3.57	parkAui::builder::gauss::gaussXmlDataSource::GaussXmlData Class Reference . . .	75
3.58	parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlData Class Reference . .	76
3.59	parkAui::builder::gauss::gaussXmlDataSource::GaussXmlDataset Class Reference .	77
3.60	parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlDataset Class Reference	78
3.61	parkAui::builder::gauss::gaussXmlDataSource::GaussXmlDataSource Class Reference	79
3.62	parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlDataSource Class Refer- ence . . . . .	80
3.63	parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlInstData Class Reference	81
3.64	parkAui::builder::gauss::gaussXmlDataSource::GaussXmlInstData Class Reference	82
3.65	parkAui::plot::plotPanel::GeneralPlotProperty Class Reference . . . . .	83
3.66	servers::job::Job Class Reference . . . . .	84
3.67	servers::queueSys::Job Class Reference . . . . .	87
3.68	parkAui::common::jobOverviewPanel::JobOverviewPanel Class Reference . . . . .	89
3.69	parkAui::common::jobOverviewPanel0::JobOverviewPanel Class Reference . . . . .	90
3.70	parkAui::common::jobPanel::JobPanel Class Reference . . . . .	91
3.71	servers::jobQueue::JobQueueException Class Reference . . . . .	92
3.72	parkAui::common::jobTreeListPanel::JobTreeListPanel Class Reference . . . . .	93
3.73	parkAui::plot::plotPanel::LineAttribute Class Reference . . . . .	94
3.74	servers::mapClient::MapClient Class Reference . . . . .	95
3.75	servers::mapServer::MapServer Class Reference . . . . .	98
3.76	servers::mapService::MapService Class Reference . . . . .	101
3.77	parkAui::plot::plotPanel::MarkerAttribute Class Reference . . . . .	104
3.78	parkAui::plot::matplotPanel::MatPlotAttribute Class Reference . . . . .	105
3.79	parkAui::plot::matplotPanelE3::MatPlotFrameE3 Class Reference . . . . .	107
3.80	parkAui::plot::matplotPanelP::MatPlotFrameE3 Class Reference . . . . .	108
3.81	parkAui::plot::matplotPanelE4::MatPlotFrameE4 Class Reference . . . . .	109
3.82	parkAui::plot::matplotPanelP::MatPlotFrameE4 Class Reference . . . . .	110
3.83	parkAui::plot::matplotPanelF::MatPlotFrameF Class Reference . . . . .	111
3.84	parkAui::plot::matplotPanelP::MatPlotFrameF Class Reference . . . . .	112
3.85	parkAui::plot::matplotPanelP::MatPlotFrameP Class Reference . . . . .	113
3.86	parkAui::plot::matplotPanel::MatPlotPanel Class Reference . . . . .	114
3.87	parkAui::plot::matplotPanelE3::MatPlotPanelE3 Class Reference . . . . .	115
3.88	parkAui::plot::matplotPanelP::MatPlotPanelE3 Class Reference . . . . .	116
3.89	parkAui::plot::matplotPanelE4::MatPlotPanelE4 Class Reference . . . . .	117
3.90	parkAui::plot::matplotPanelP::MatPlotPanelE4 Class Reference . . . . .	118
3.91	parkAui::plot::matplotPanelF::MatPlotPanelF Class Reference . . . . .	119
3.92	parkAui::plot::matplotPanelP::MatPlotPanelF Class Reference . . . . .	120

3.93	parkAui::plot::matplotPanelP::MatPlotPanelP Class Reference . . . . .	121
3.94	parkAui::common::modelPage::ModelPage Class Reference . . . . .	122
3.95	servers::msgQueue::MsgQueue Class Reference . . . . .	123
3.96	servers::msgQueue::MsgQueueSys Class Reference . . . . .	125
3.97	parkUI::networkThread::NetworkClient Class Reference . . . . .	127
3.98	parkAui::common::networkThreadNew::NetworkClient Class Reference . . . . .	128
3.99	parkAui::common::networkThreadNew::NetworkEvent Class Reference . . . . .	129
3.100	parkUI::networkThread::NetworkThread Class Reference . . . . .	130
3.101	parkAui::common::networkThreadNew::NetworkThread Class Reference . . . . .	131
3.102	servers::queueNormal::NormalQueue Class Reference . . . . .	132
3.103	parkAui::xmlUtil::optimizer::Optimizer Class Reference . . . . .	134
3.104	parkAui::parkFrame::ParkApp Class Reference . . . . .	135
3.105	parkAui::parkApp::ParkApp Class Reference . . . . .	136
3.106	parkAui::common::datasetEvent::ParkDatasetEvent Class Reference . . . . .	137
3.107	parkAui::parkFrame::ParkFrame Class Reference . . . . .	138
3.108	parkAui::common::jobEvent::ParkJobEvent Class Reference . . . . .	139
3.109	parkAui::common::modelEvent::ParkModelEvent Class Reference . . . . .	140
3.110	parkAui::common::parkOptimizerPanel::ParkOptimizerPanel Class Reference . . . . .	141
3.111	parkAui::common::modelEvent::ParkParameterEvent Class Reference . . . . .	142
3.112	parkAui::common::parkPatternPanel::ParkPatternData Class Reference . . . . .	143
3.113	parkUI::reply::ParkReply Class Reference . . . . .	144
3.114	parkUI::replyEcho::ParkReplyEcho Class Reference . . . . .	145
3.115	parkAui::common::replyEvent::ParkReplyEvent Class Reference . . . . .	146
3.116	parkAui::plot::plotPanel::PlotAttribute Class Reference . . . . .	149
3.117	parkAui::plot::polyErrorbar::PlotFrame Class Reference . . . . .	151
3.118	parkAui::plot::plotPanelE3::PlotFrameE3 Class Reference . . . . .	152
3.119	parkAui::plot::plotPanelE4::PlotFrameE4 Class Reference . . . . .	153
3.120	parkAui::plot::plotPanelEF::PlotFrameEF Class Reference . . . . .	154
3.121	parkAui::plot::plotPanelF::PlotFrameF Class Reference . . . . .	155
3.122	parkAui::plot::plotPanelP::PlotFrameP Class Reference . . . . .	156
3.123	parkAui::plot::plotPanelR::PlotFrameR Class Reference . . . . .	157
3.124	parkAui::plot::plotPanelR2::PlotFrameR2 Class Reference . . . . .	158
3.125	parkAui::plot::plotPanel::PlotPanel Class Reference . . . . .	159
3.126	parkAui::plot::plotPanelE3::PlotPanelE3 Class Reference . . . . .	160
3.127	parkAui::plot::plotPanelE4::PlotPanelE4 Class Reference . . . . .	161
3.128	parkAui::plot::plotPanelEF::PlotPanelEF Class Reference . . . . .	162

---

3.129	parkAui::plot::plotPanelF::PlotPanelF Class Reference . . . . .	163
3.130	parkAui::plot::plotPanelP::PlotPanelP Class Reference . . . . .	164
3.131	parkAui::plot::plotPanelR::PlotPanelR Class Reference . . . . .	165
3.132	parkAui::plot::plotPanelR2::PlotPanelR2 Class Reference . . . . .	166
3.133	parkAui::plot::polyErrorbar::PolyErrorbar Class Reference . . . . .	167
3.134	servers::queuePriority::PriorityQueue Class Reference . . . . .	168
3.135	servers::queueSys::QueueSys Class Reference . . . . .	170
3.136	servers::replySession::ReplySession Class Reference . . . . .	173
3.137	servers::service::Service Class Reference . . . . .	175
3.138	servers::serviceClientMap::ServiceClientMapIn Class Reference . . . . .	177
3.139	servers::serviceClientMap::ServiceClientMapOut Class Reference . . . . .	179
3.140	servers::serviceService::ServiceCommand Class Reference . . . . .	180
3.141	servers::serviceService::ServiceIn Class Reference . . . . .	181
3.142	servers::serviceMap::ServiceMapIn Class Reference . . . . .	183
3.143	servers::serviceMap::ServiceMapOut Class Reference . . . . .	185
3.144	servers::serviceService::ServiceOut Class Reference . . . . .	186
3.145	servers::serviceService::ServiceProcess Class Reference . . . . .	187
3.146	servers::serviceService::ServiceProcess_old Class Reference . . . . .	189
3.147	servers::serviceServer::ServiceServer Class Reference . . . . .	190
3.148	servers::serviceService::ServiceThread Class Reference . . . . .	192
3.149	parkAui::xmlUtil::serviceXml::ServiceXml Class Reference . . . . .	193
3.150	parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous Class Reference . . . . .	194
3.151	parkAui::xmlUtil::serviceXmlAttr::ServiceXmlAttr Class Reference . . . . .	197
3.152	servers::storageSys::StorageSystem Class Reference . . . . .	198
3.153	servers::xmlTask::TaskSession Class Reference . . . . .	199
3.154	parkAui::xmlUtil::theory::Theory Class Reference . . . . .	200
3.155	parkAui::xmlUtil::theory0::Theory Class Reference . . . . .	201
3.156	parkAui::xmlUtil::xmlAttribute::XmlAttribute Class Reference . . . . .	202
3.157	parkAui::xmlUtil::xmlConstrain::XmlConstrain Class Reference . . . . .	203
3.158	parkAui::xmlUtil::xmlConstrain::XmlConstrains Class Reference . . . . .	204
3.159	parkAui::xmlUtil::xmlData::XmlData Class Reference . . . . .	205
3.160	servers::xmlDatasetSvr::XmlData Class Reference . . . . .	206
3.161	parkAui::xmlUtil::xmlDataArray::XmlDataArray Class Reference . . . . .	207
3.162	parkAui::xmlUtil::xmlDataMatrix::XmlDataMatrix Class Reference . . . . .	208
3.163	parkAui::xmlUtil::xmlDataNArray::XmlDataNArray Class Reference . . . . .	209
3.164	parkAui::xmlUtil::xmlDataObject::XmlDataObject Class Reference . . . . .	210

---

3.165	servers::xmlDatasetSvr::XmlDataset Class Reference . . . . .	211
3.166	parkAui::xmlUtil::xmlDataset::XmlDataset Class Reference . . . . .	212
3.167	parkAui::xmlUtil::xmlFitting::XmlFitting Class Reference . . . . .	213
3.168	parkAui::xmlUtil::xmlFittingJob::XmlFittingJob Class Reference . . . . .	214
3.169	servers::xmlJobGroup::XmlGroup Class Reference . . . . .	215
3.170	servers::xmlGroup::XmlGroup Class Reference . . . . .	217
3.171	servers::xmlResource::XmlGroupDependence Class Reference . . . . .	219
3.172	servers::xmlJobGroupReduce::XmlGroupInfo Class Reference . . . . .	221
3.173	servers::xmlJobGroupReduce::XmlGroupReduce Class Reference . . . . .	222
3.174	parkAui::xmlUtil::xmlDataMeta::XmlInstrumentData Class Reference . . . . .	224
3.175	servers::xmlJobSvr::XmlJob Class Reference . . . . .	225
3.176	parkAui::xmlUtil::xmlJob::XmlJob Class Reference . . . . .	228
3.177	servers::xmlResource::XmlJobDependence Class Reference . . . . .	229
3.178	servers::xmlJobList::XmlJobList Class Reference . . . . .	231
3.179	parkAui::xmlUtil::xmlJob::XmlJobList Class Reference . . . . .	234
3.180	parkAui::xmlUtil::xmlJobReply::XmlJobReply Class Reference . . . . .	235
3.181	parkAui::xmlUtil::xmlJobReply::XmlJobReplyData Class Reference . . . . .	236
3.182	servers::xmlJobSession::XmlJobSession Class Reference . . . . .	237
3.183	parkAui::xmlUtil::xmlJobStatus::XmlJobStatus Class Reference . . . . .	240
3.184	parkAui::xmlUtil::xmlDataMeta::XmlMetaData Class Reference . . . . .	241
3.185	parkAui::xmlUtil::xmlModel::XmlModel Class Reference . . . . .	242
3.186	parkAui::xmlUtil::xmlMultiplexor::XmlMultiplexor Class Reference . . . . .	243
3.187	parkAui::xmlUtil::xmlNamedObject::XmlNamedObject Class Reference . . . . .	244
3.188	parkAui::xmlUtil::xmlObject::XmlObject Class Reference . . . . .	247
3.189	parkAui::xmlUtil::xmlOptimizer::XmlOptimizer Class Reference . . . . .	248
3.190	parkAui::xmlUtil::xmlOptResults::XmlOptResults Class Reference . . . . .	249
3.191	parkAui::xmlUtil::xmlParameter::XmlParameter Class Reference . . . . .	250
3.192	servers::xmlReduceJob::XmlReduceJob Class Reference . . . . .	251
3.193	parkAui::xmlUtil::xmlDataReduction::XmlReductionData Class Reference . . . . .	252
3.194	servers::xmlResource::XmlResource Class Reference . . . . .	253
3.195	servers::xmlSession::XmlSession Class Reference . . . . .	255
3.196	servers::xmlGroupSession::XmlSession Class Reference . . . . .	257
3.197	servers::xmlTask::XmlTask Class Reference . . . . .	259
3.198	parkAui::xmlUtil::xmlDataTheory::XmlTheoryData Class Reference . . . . .	263
3.199	parkAui::xmlUtil::xmlVariable::XmlVariable Class Reference . . . . .	264
3.200	parkAui::xmlUtil::xmlVariable::XmlVariables Class Reference . . . . .	265

# Chapter 1

## PARK Hierarchical Index

### 1.1 PARK Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

servers::queueAbstract::AbstractQueue . . . . .	13
servers::archiveSys::ArchiveSystem . . . . .	15
parkAui::plot::auiContainer::AuiContainer . . . . .	16
parkAui::plot::auiPanel::AuiPanel . . . . .	17
servers::cluster::Cluster . . . . .	18
servers::cluster::ClusterController . . . . .	20
servers::cluster::ClusterNode . . . . .	22
servers::cluster::ClusterService . . . . .	23
parkAui::common::fittingConstrain::ConstrainParameter . . . . .	24
parkAui::common::fittingConstrain1::ConstrainParameter . . . . .	25
parkAui::common::fittingConstrain3::ConstrainParameter . . . . .	27
parkAui::common::fittingConstrain::ConstrainTable . . . . .	29
parkAui::common::fittingConstrain1::ConstrainTable . . . . .	30
parkAui::common::fittingConstrain2::ConstrainTable . . . . .	31
parkAui::common::fittingConstrain3::ConstrainTable . . . . .	32
parkAui::common::fittingConstrainTable::ConstrainTable . . . . .	33
servers::queueFifo::FifoQueue . . . . .	34
parkAui::common::fittingBuilder0::FittingBuilder . . . . .	36
parkAui::common::overviewFitting::FittingBuilder . . . . .	37
parkAui::common::overviewModelDataset::FittingBuilder . . . . .	38
parkAui::common::fittingBuilder::FittingBuilder . . . . .	39
parkAui::common::fittingConstrain::FittingConstrain . . . . .	40
parkAui::common::fittingConstrain0::FittingConstrain . . . . .	41
parkAui::common::fittingConstrain1::FittingConstrain . . . . .	42
parkAui::common::fittingConstrain2::FittingConstrain . . . . .	43
parkAui::common::fittingConstrain3::FittingConstrain . . . . .	44
parkAui::common::fittingConstrain::FittingConstrainGrid . . . . .	45
parkAui::common::fittingConstrain0::FittingConstrainGrid . . . . .	46
parkAui::common::fittingConstrain1::FittingConstrainGrid . . . . .	47
parkAui::common::fittingConstrain2::FittingConstrainGrid . . . . .	48
parkAui::common::fittingConstrain3::FittingConstrainGrid . . . . .	49
parkAui::common::fittingDatasetDataPanel::FittingDatasetDataPanel . . . . .	50
parkAui::common::fittingDatasetEditor::FittingDatasetEditor . . . . .	51

parkAui::common::fittingDatasetMetaPanel::FittingDatasetMetaPanel . . . . .	52
parkAui::common::fittingDatasetPanel::FittingDatasetPanel . . . . .	53
parkAui::common::fittingDatasetPanel0::FittingDatasetPanel0 . . . . .	54
parkAui::common::fittingDatasetPanel1::FittingDatasetPanel1 . . . . .	55
parkAui::common::fittingOverview::FittingOverview . . . . .	56
parkAui::common::fittingOverview0::FittingOverview . . . . .	57
parkAui::common::fittingPanel::FittingPanel . . . . .	58
parkAui::common::fittingParameter::FittingParameterPanel . . . . .	59
parkAui::common::fittingParameter::FittingParameterTable . . . . .	60
parkAui::common::fittingResidual::FittingResidual . . . . .	61
parkAui::common::fittingResidual1D::FittingResidual1D . . . . .	62
parkAui::common::fittingViewer::FittingViewer . . . . .	63
parkAui::common::fittingViewer1D::FittingViewer1D . . . . .	64
parkAui::builder::gauss::gaussData::GaussData . . . . .	65
parkAui::builder::gauss::gaussDataset::GaussDataset . . . . .	66
parkAui::builder::gauss::gaussDatasetDataPanel::GaussDatasetDataPanel . . . . .	67
parkAui::builder::gauss::gaussDatasetDataPanelP::GaussDatasetDataPanel . . . . .	68
parkAui::builder::gauss::gDatasetPanel::GaussDatasetPanel . . . . .	69
parkAui::builder::gauss::gaussDatasetViewer::GaussDatasetViewer . . . . .	70
parkAui::builder::gauss::gaussDataset::GaussDataSource . . . . .	71
parkAui::builder::gauss::gaussData::GaussInstrumentData . . . . .	72
parkAui::builder::gauss::gaussTheory::GaussParameter . . . . .	73
parkAui::builder::gauss::gaussTheory::GaussTheory . . . . .	74
parkAui::builder::gauss::gaussXmlDataSource::GaussXmlData . . . . .	75
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlData . . . . .	76
parkAui::builder::gauss::gaussXmlDataSource::GaussXmlDataset . . . . .	77
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlDataset . . . . .	78
parkAui::builder::gauss::gaussXmlDataSource::GaussXmlDataSource . . . . .	79
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlDataSource . . . . .	80
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlInstData . . . . .	81
parkAui::builder::gauss::gaussXmlDataSource::GaussXmlInstData . . . . .	82
parkAui::plot::plotPanel::GeneralPlotProperty . . . . .	83
servers::job::Job . . . . .	84
servers::queueSys::Job . . . . .	87
parkAui::common::jobOverviewPanel::JobOverviewPanel . . . . .	89
parkAui::common::jobOverviewPanel0::JobOverviewPanel . . . . .	90
parkAui::common::jobPanel::JobPanel . . . . .	91
servers::jobQueue::JobQueueException . . . . .	92
parkAui::common::jobTreeListPanel::JobTreeListPanel . . . . .	93
parkAui::plot::plotPanel::LineAttribute . . . . .	94
parkAui::plot::plotPanel::MarkerAttribute . . . . .	104
servers::mapClient::MapClient . . . . .	95
servers::mapServer::MapServer . . . . .	98
servers::mapService::MapService . . . . .	101
parkAui::plot::matplotPanel::MatPlotAttribute . . . . .	105
parkAui::plot::matplotPanelE3::MatPlotFrameE3 . . . . .	107
parkAui::plot::matplotPanelP::MatPlotFrameE3 . . . . .	108
parkAui::plot::matplotPanelE4::MatPlotFrameE4 . . . . .	109
parkAui::plot::matplotPanelP::MatPlotFrameE4 . . . . .	110
parkAui::plot::matplotPanelF::MatPlotFrameF . . . . .	111
parkAui::plot::matplotPanelP::MatPlotFrameF . . . . .	112
parkAui::plot::matplotPanelP::MatPlotFrameP . . . . .	113
parkAui::plot::matplotPanel::MatPlotPanel . . . . .	114

parkAui::plot::matplotPanelE3::MatPlotPanelE3	115
parkAui::plot::matplotPanelP::MatPlotPanelE3	116
parkAui::plot::matplotPanelP::MatPlotPanelF	120
parkAui::plot::matplotPanelP::MatPlotPanelF	120
parkAui::plot::matplotPanelE4::MatPlotPanelE4	117
parkAui::plot::matplotPanelP::MatPlotPanelE4	118
parkAui::plot::matplotPanelF::MatPlotPanelF	119
parkAui::plot::matplotPanelP::MatPlotPanelP	121
parkAui::common::modelPage::ModelPage	122
servers::msgQueue::MsgQueue	123
servers::msgQueue::MsgQueueSys	125
parkUI::networkThread::NetworkClient	127
parkAui::common::networkThreadNew::NetworkClient	128
parkAui::common::networkThreadNew::NetworkEvent	129
parkUI::networkThread::NetworkThread	130
parkAui::common::networkThreadNew::NetworkThread	131
servers::queueNormal::NormalQueue	132
parkAui::xmlUtil::optimizer::Optimizer	134
parkAui::parkFrame::ParkApp	135
parkAui::parkApp::ParkApp	136
parkAui::common::datasetEvent::ParkDatasetEvent	137
parkAui::parkFrame::ParkFrame	138
parkAui::common::jobEvent::ParkJobEvent	139
parkAui::common::modelEvent::ParkModelEvent	140
parkAui::common::parkOptimizerPanel::ParkOptimizerPanel	141
parkAui::common::modelEvent::ParkParameterEvent	142
parkAui::common::parkPatternPanel::ParkPatternData	143
parkUI::reply::ParkReply	144
parkUI::replyEcho::ParkReplyEcho	145
parkAui::common::replyEvent::ParkReplyEvent	146
parkAui::plot::plotPanel::PlotAttribute	149
parkAui::plot::polyErrorbar::PlotFrame	151
parkAui::plot::plotPanelE3::PlotFrameE3	152
parkAui::plot::plotPanelE4::PlotFrameE4	153
parkAui::plot::plotPanelEF::PlotFrameEF	154
parkAui::plot::plotPanelF::PlotFrameF	155
parkAui::plot::plotPanelP::PlotFrameP	156
parkAui::plot::plotPanelR::PlotFrameR	157
parkAui::plot::plotPanelR2::PlotFrameR2	158
parkAui::plot::plotPanel::PlotPanel	159
parkAui::plot::plotPanelE3::PlotPanelE3	160
parkAui::plot::plotPanelE4::PlotPanelE4	161
parkAui::plot::plotPanelEF::PlotPanelEF	162
parkAui::plot::plotPanelF::PlotPanelF	163
parkAui::plot::plotPanelP::PlotPanelP	164
parkAui::plot::plotPanelR::PlotPanelR	165
parkAui::plot::plotPanelR2::PlotPanelR2	166
parkAui::plot::polyErrorbar::PolyErrorbar	167
servers::queuePriority::PriorityQueue	168
servers::queueSys::QueueSys	170
servers::replySession::ReplySession	173
servers::service::Service	175
servers::serviceClientMap::ServiceClientMapIn	177

servers::serviceClientMap::ServiceClientMapOut . . . . .	179
servers::serviceService::ServiceCommand . . . . .	180
servers::serviceService::ServiceIn . . . . .	181
servers::serviceMap::ServiceMapIn . . . . .	183
servers::serviceMap::ServiceMapOut . . . . .	185
servers::serviceService::ServiceOut . . . . .	186
servers::serviceService::ServiceProcess . . . . .	187
servers::serviceService::ServiceProcess_old . . . . .	189
servers::serviceServer::ServiceServer . . . . .	190
servers::serviceService::ServiceThread . . . . .	192
parkAui::xmlUtil::serviceXml::ServiceXml . . . . .	193
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous . . . . .	194
parkAui::xmlUtil::serviceXmlAttr::ServiceXmlAttr . . . . .	197
servers::storageSys::StorageSystem . . . . .	198
servers::xmlTask::TaskSession . . . . .	199
parkAui::xmlUtil::theory::Theory . . . . .	200
parkAui::xmlUtil::theory0::Theory . . . . .	201
parkAui::xmlUtil::xmlAttribute::XmlAttribute . . . . .	202
parkAui::xmlUtil::xmlConstrain::XmlConstrain . . . . .	203
parkAui::xmlUtil::xmlConstrain::XmlConstrains . . . . .	204
parkAui::xmlUtil::xmlData::XmlData . . . . .	205
servers::xmlDatasetSvr::XmlData . . . . .	206
parkAui::xmlUtil::xmlDataArray::XmlDataArray . . . . .	207
parkAui::xmlUtil::xmlDataMatrix::XmlDataMatrix . . . . .	208
parkAui::xmlUtil::xmlDataNArray::XmlDataNArray . . . . .	209
parkAui::xmlUtil::xmlDataObject::XmlDataObject . . . . .	210
servers::xmlDatasetSvr::XmlDataset . . . . .	211
parkAui::xmlUtil::xmlDataset::XmlDataset . . . . .	212
parkAui::xmlUtil::xmlFitting::XmlFitting . . . . .	213
parkAui::xmlUtil::xmlFittingJob::XmlFittingJob . . . . .	214
servers::xmlJobGroup::XmlGroup . . . . .	215
servers::xmlGroup::XmlGroup . . . . .	217
servers::xmlResource::XmlGroupDependence . . . . .	219
servers::xmlJobGroupReduce::XmlGroupInfo . . . . .	221
servers::xmlJobGroupReduce::XmlGroupReduce . . . . .	222
parkAui::xmlUtil::xmlDataMeta::XmlInstrumentData . . . . .	224
servers::xmlJobSvr::XmlJob . . . . .	225
parkAui::xmlUtil::xmlJob::XmlJob . . . . .	228
servers::xmlResource::XmlJobDependence . . . . .	229
servers::xmlJobList::XmlJobList . . . . .	231
parkAui::xmlUtil::xmlJob::XmlJobList . . . . .	234
parkAui::xmlUtil::xmlJobReply::XmlJobReply . . . . .	235
parkAui::xmlUtil::xmlJobReply::XmlJobReplyData . . . . .	236
servers::xmlJobSession::XmlJobSession . . . . .	237
parkAui::xmlUtil::xmlJobStatus::XmlJobStatus . . . . .	240
parkAui::xmlUtil::xmlDataMeta::XmlMetaData . . . . .	241
parkAui::xmlUtil::xmlModel::XmlModel . . . . .	242
parkAui::xmlUtil::xmlMultiplexor::XmlMultiplexor . . . . .	243
parkAui::xmlUtil::xmlNamedObject::XmlNamedObject . . . . .	244
parkAui::xmlUtil::xmlObject::XmlObject . . . . .	247
parkAui::xmlUtil::xmlOptimizer::XmlOptimizer . . . . .	248
parkAui::xmlUtil::xmlOptResults::XmlOptResults . . . . .	249
parkAui::xmlUtil::xmlParameter::XmlParameter . . . . .	250
servers::xmlReduceJob::XmlReduceJob . . . . .	251

---

parkAui::xmlUtil::xmlDataReduction::XmlReductionData . . . . .	252
servers::xmlResource::XmlResource . . . . .	253
servers::xmlSession::XmlSession . . . . .	255
servers::xmlGroupSession::XmlSession . . . . .	257
servers::xmlTask::XmlTask . . . . .	259
parkAui::xmlUtil::xmlDataTheory::XmlTheoryData . . . . .	263
parkAui::xmlUtil::xmlVariable::XmlVariable . . . . .	264
parkAui::xmlUtil::xmlVariable::XmlVariables . . . . .	265



# Chapter 2

## PARK Class Index

### 2.1 PARK Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

<code>servers::queueAbstract::AbstractQueue</code>	13
<code>servers::archiveSys::ArchiveSystem</code>	15
<code>parkAui::plot::auiContainer::AuiContainer</code>	16
<code>parkAui::plot::auiPanel::AuiPanel</code>	17
<code>servers::cluster::Cluster</code>	18
<code>servers::cluster::ClusterController</code>	20
<code>servers::cluster::ClusterNode</code>	22
<code>servers::cluster::ClusterService</code>	23
<code>parkAui::common::fittingConstrain::ConstrainParameter</code>	24
<code>parkAui::common::fittingConstrain1::ConstrainParameter</code>	25
<code>parkAui::common::fittingConstrain3::ConstrainParameter</code>	27
<code>parkAui::common::fittingConstrain::ConstrainTable</code>	29
<code>parkAui::common::fittingConstrain1::ConstrainTable</code>	30
<code>parkAui::common::fittingConstrain2::ConstrainTable</code>	31
<code>parkAui::common::fittingConstrain3::ConstrainTable</code>	32
<code>parkAui::common::fittingConstrainTable::ConstrainTable</code>	33
<code>servers::queueFifo::FifoQueue</code>	34
<code>parkAui::common::fittingBuilder0::FittingBuilder</code>	36
<code>parkAui::common::overviewFitting::FittingBuilder</code>	37
<code>parkAui::common::overviewModelDataset::FittingBuilder</code>	38
<code>parkAui::common::fittingBuilder::FittingBuilder</code>	39
<code>parkAui::common::fittingConstrain::FittingConstrain</code>	40
<code>parkAui::common::fittingConstrain0::FittingConstrain</code>	41
<code>parkAui::common::fittingConstrain1::FittingConstrain</code>	42
<code>parkAui::common::fittingConstrain2::FittingConstrain</code>	43
<code>parkAui::common::fittingConstrain3::FittingConstrain</code>	44
<code>parkAui::common::fittingConstrain::FittingConstrainGrid</code>	45
<code>parkAui::common::fittingConstrain0::FittingConstrainGrid</code>	46
<code>parkAui::common::fittingConstrain1::FittingConstrainGrid</code>	47
<code>parkAui::common::fittingConstrain2::FittingConstrainGrid</code>	48
<code>parkAui::common::fittingConstrain3::FittingConstrainGrid</code>	49
<code>parkAui::common::fittingDatasetDataPanel::FittingDatasetDataPanel</code>	50
<code>parkAui::common::fittingDatasetEditor::FittingDatasetEditor</code>	51

parkAui::common::fittingDatasetMetaPanel::FittingDatasetMetaPanel . . . . .	52
parkAui::common::fittingDatasetPanel::FittingDatasetPanel . . . . .	53
parkAui::common::fittingDatasetPanel0::FittingDatasetPanel0 . . . . .	54
parkAui::common::fittingDatasetPanel1::FittingDatasetPanel1 . . . . .	55
parkAui::common::fittingOverview::FittingOverview . . . . .	56
parkAui::common::fittingOverview0::FittingOverview . . . . .	57
parkAui::common::fittingPanel::FittingPanel . . . . .	58
parkAui::common::fittingParameter::FittingParameterPanel . . . . .	59
parkAui::common::fittingParameter::FittingParameterTable . . . . .	60
parkAui::common::fittingResidual::FittingResidual . . . . .	61
parkAui::common::fittingResidual1D::FittingResidual1D . . . . .	62
parkAui::common::fittingViewer::FittingViewer . . . . .	63
parkAui::common::fittingViewer1D::FittingViewer1D . . . . .	64
parkAui::builder::gauss::gaussData::GaussData . . . . .	65
parkAui::builder::gauss::gaussDataset::GaussDataset . . . . .	66
parkAui::builder::gauss::gaussDatasetDataPanel::GaussDatasetDataPanel . . . . .	67
parkAui::builder::gauss::gaussDatasetDataPanelIP::GaussDatasetDataPanel . . . . .	68
parkAui::builder::gauss::gDatasetPanel::GaussDatasetPanel . . . . .	69
parkAui::builder::gauss::gaussDatasetViewer::GaussDatasetViewer . . . . .	70
parkAui::builder::gauss::gaussDataset::GaussDataSource . . . . .	71
parkAui::builder::gauss::gaussData::GaussInstrumentData . . . . .	72
parkAui::builder::gauss::gaussTheory::GaussParameter . . . . .	73
parkAui::builder::gauss::gaussTheory::GaussTheory . . . . .	74
parkAui::builder::gauss::gaussXmlDataSource::GaussXmlData . . . . .	75
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlData . . . . .	76
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlDataset . . . . .	77
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlDataset . . . . .	78
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlDataSource . . . . .	79
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlDataSource . . . . .	80
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlInstData . . . . .	81
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlInstData . . . . .	82
parkAui::plot::plotPanel::GeneralPlotProperty . . . . .	83
servers::job::Job . . . . .	84
servers::queueSys::Job . . . . .	87
parkAui::common::jobOverviewPanel::JobOverviewPanel . . . . .	89
parkAui::common::jobOverviewPanel0::JobOverviewPanel . . . . .	90
parkAui::common::jobPanel::JobPanel . . . . .	91
servers::jobQueue::JobQueueException . . . . .	92
parkAui::common::jobTreeListPanel::JobTreeListPanel . . . . .	93
parkAui::plot::plotPanel::LineAttribute . . . . .	94
servers::mapClient::MapClient . . . . .	95
servers::mapServer::MapServer . . . . .	98
servers::mapService::MapService . . . . .	101
parkAui::plot::plotPanel::MarkerAttribute . . . . .	104
parkAui::plot::matplotPanel::MatPlotAttribute . . . . .	105
parkAui::plot::matplotPanelE3::MatPlotFrameE3 . . . . .	107
parkAui::plot::matplotPanelP::MatPlotFrameE3 . . . . .	108
parkAui::plot::matplotPanelE4::MatPlotFrameE4 . . . . .	109
parkAui::plot::matplotPanelP::MatPlotFrameE4 . . . . .	110
parkAui::plot::matplotPanelF::MatPlotFrameF . . . . .	111
parkAui::plot::matplotPanelP::MatPlotFrameF . . . . .	112
parkAui::plot::matplotPanelP::MatPlotFrameP . . . . .	113
parkAui::plot::matplotPanel::MatPlotPanel . . . . .	114
parkAui::plot::matplotPanelE3::MatPlotPanelE3 . . . . .	115

parkAui::plot::matplotPanelP::MatPlotPanelE3	116
parkAui::plot::matplotPanelE4::MatPlotPanelE4	117
parkAui::plot::matplotPanelP::MatPlotPanelE4	118
parkAui::plot::matplotPanelF::MatPlotPanelF	119
parkAui::plot::matplotPanelP::MatPlotPanelF	120
parkAui::plot::matplotPanelP::MatPlotPanelP	121
parkAui::common::modelPage::ModelPage	122
servers::msgQueue::MsgQueue	123
servers::msgQueue::MsgQueueSys	125
parkUI::networkThread::NetworkClient	127
parkAui::common::networkThreadNew::NetworkClient	128
parkAui::common::networkThreadNew::NetworkEvent	129
parkUI::networkThread::NetworkThread	130
parkAui::common::networkThreadNew::NetworkThread	131
servers::queueNormal::NormalQueue	132
parkAui::xmlUtil::optimizer::Optimizer	134
parkAui::parkFrame::ParkApp	135
parkAui::parkApp::ParkApp	136
parkAui::common::datasetEvent::ParkDatasetEvent	137
parkAui::parkFrame::ParkFrame	138
parkAui::common::jobEvent::ParkJobEvent	139
parkAui::common::modelEvent::ParkModelEvent	140
parkAui::common::parkOptimizerPanel::ParkOptimizerPanel	141
parkAui::common::modelEvent::ParkParameterEvent	142
parkAui::common::parkPatternPanel::ParkPatternData	143
parkUI::reply::ParkReply	144
parkUI::replyEcho::ParkReplyEcho	145
parkAui::common::replyEvent::ParkReplyEvent	146
parkAui::plot::plotPanel::PlotAttribute	149
parkAui::plot::polyErrorbar::PlotFrame (Simple testing)	151
parkAui::plot::plotPanelE3::PlotFrameE3	152
parkAui::plot::plotPanelE4::PlotFrameE4	153
parkAui::plot::plotPanelEF::PlotFrameEF	154
parkAui::plot::plotPanelF::PlotFrameF	155
parkAui::plot::plotPanelP::PlotFrameP	156
parkAui::plot::plotPanelR::PlotFrameR	157
parkAui::plot::plotPanelR2::PlotFrameR2	158
parkAui::plot::plotPanel::PlotPanel	159
parkAui::plot::plotPanelE3::PlotPanelE3	160
parkAui::plot::plotPanelE4::PlotPanelE4	161
parkAui::plot::plotPanelEF::PlotPanelEF	162
parkAui::plot::plotPanelF::PlotPanelF	163
parkAui::plot::plotPanelP::PlotPanelP	164
parkAui::plot::plotPanelR::PlotPanelR	165
parkAui::plot::plotPanelR2::PlotPanelR2	166
parkAui::plot::polyErrorbar::PolyErrorbar	167
servers::queuePriority::PriorityQueue	168
servers::queueSys::QueueSys	170
servers::replySession::ReplySession	173
servers::service::Service	175
servers::serviceClientMap::ServiceClientMapIn	177
servers::serviceClientMap::ServiceClientMapOut	179
servers::serviceService::ServiceCommand	180
servers::serviceService::ServiceIn	181

servers::serviceMap::ServiceMapIn	183
servers::serviceMap::ServiceMapOut	185
servers::serviceService::ServiceOut	186
servers::serviceService::ServiceProcess	187
servers::serviceService::ServiceProcess_old	189
servers::serviceServer::ServiceServer	190
servers::serviceService::ServiceThread	192
parkAui::xmlUtil::serviceXml::ServiceXml	193
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous	194
parkAui::xmlUtil::serviceXmlAttr::ServiceXmlAttr	197
servers::storageSys::StorageSystem	198
servers::xmlTask::TaskSession	199
parkAui::xmlUtil::theory::Theory	200
parkAui::xmlUtil::theory0::Theory	201
parkAui::xmlUtil::xmlAttribute::XmlAttribute	202
parkAui::xmlUtil::xmlConstrain::XmlConstrain	203
parkAui::xmlUtil::xmlConstrain::XmlConstrains (The generic interface for the data source )	204
parkAui::xmlUtil::xmlData::XmlData	205
servers::xmlDatasetSvr::XmlData	206
parkAui::xmlUtil::xmlDataArray::XmlDataArray	207
parkAui::xmlUtil::xmlDataMatrix::XmlDataMatrix	208
parkAui::xmlUtil::xmlDataNArray::XmlDataNArray	209
parkAui::xmlUtil::xmlDataObject::XmlDataObject	210
servers::xmlDatasetSvr::XmlDataset	211
parkAui::xmlUtil::xmlDataset::XmlDataset	212
parkAui::xmlUtil::xmlFitting::XmlFitting	213
parkAui::xmlUtil::xmlFittingJob::XmlFittingJob	214
servers::xmlJobGroup::XmlGroup	215
servers::xmlGroup::XmlGroup	217
servers::xmlResource::XmlGroupDependence	219
servers::xmlJobGroupReduce::XmlGroupInfo	221
servers::xmlJobGroupReduce::XmlGroupReduce	222
parkAui::xmlUtil::xmlDataMeta::XmlInstrumentData	224
servers::xmlJobSvr::XmlJob	225
parkAui::xmlUtil::xmlJob::XmlJob	228
servers::xmlResource::XmlJobDependence	229
servers::xmlJobList::XmlJobList	231
parkAui::xmlUtil::xmlJob::XmlJobList	234
parkAui::xmlUtil::xmlJobReply::XmlJobReply	235
parkAui::xmlUtil::xmlJobReply::XmlJobReplyData	236
servers::xmlJobSession::XmlJobSession	237
parkAui::xmlUtil::xmlJobStatus::XmlJobStatus	240
parkAui::xmlUtil::xmlDataMeta::XmlMetaData	241
parkAui::xmlUtil::xmlModel::XmlModel	242
parkAui::xmlUtil::xmlMultiplexor::XmlMultiplexor	243
parkAui::xmlUtil::xmlNamedObject::XmlNamedObject	244
parkAui::xmlUtil::xmlObject::XmlObject	247
parkAui::xmlUtil::xmlOptimizer::XmlOptimizer	248
parkAui::xmlUtil::xmlOptResults::XmlOptResults	249
parkAui::xmlUtil::xmlParameter::XmlParameter	250
servers::xmlReduceJob::XmlReduceJob	251
parkAui::xmlUtil::xmlDataReduction::XmlReductionData	252
servers::xmlResource::XmlResource	253

---

<b>servers::xmlSession::XmlSession</b> . . . . .	255
<b>servers::xmlGroupSession::XmlSession</b> . . . . .	257
<b>servers::xmlTask::XmlTask</b> . . . . .	259
<b>parkAui::xmlUtil::xmlDataTheory::XmlTheoryData</b> . . . . .	263
<b>parkAui::xmlUtil::xmlVariable::XmlVariable</b> . . . . .	264
<b>parkAui::xmlUtil::xmlVariable::XmlVariables</b> (The classes in this model deal with the model part in fitting request ) . . . . .	265



# Chapter 3

## PARK Class Documentation

### 3.1 servers::queueAbstract::AbstractQueue Class Reference

#### Public Member Functions

- def `__init__`
- def `show`
- def `showOut`
- def `search`
- def `change`
- def `remove`

#### Public Attributes

- `maxsize`
- `queue`

#### 3.1.1 Detailed Description

The base class for the queue used in QueueSys.

#### 3.1.2 Member Function Documentation

##### 3.1.2.1 def servers::queueAbstract::AbstractQueue::\_\_init\_\_ ( *self*, *maxsize* = 0)

Initialize a queue object with a given maximum size.

If *maxsize* is  $\leq 0$ , the queue size is infinite.

##### 3.1.2.2 def servers::queueAbstract::AbstractQueue::show ( *self*)

Show the contents of the queue.

**3.1.2.3** `def servers::queueAbstract::AbstractQueue::showOut ( self)`

Show the contents of the queue.

**3.1.2.4** `def servers::queueAbstract::AbstractQueue::search ( self, equfunc, keyargs)`

Search the given jobs.

**3.1.2.5** `def servers::queueAbstract::AbstractQueue::change ( self, changeF, kvals)`

Change the job contents.

**3.1.2.6** `def servers::queueAbstract::AbstractQueue::remove ( self, equfunc, keyargs)`

Remove the given jobs

The documentation for this class was generated from the following file:

- `servers/queueAbstract.py`

## 3.2 servers::archiveSys::ArchiveSystem Class Reference

### Public Member Functions

- def `__init__`
- def `open`
- def `put`
- def `get`

### Public Attributes

- `basedir`

### 3.2.1 Detailed Description

The archive system based on file.

### 3.2.2 Member Function Documentation

#### 3.2.2.1 def servers::archiveSys::ArchiveSystem::open ( *self*, *keys*, *mod* = 'a')

open a file to read/write(). The user can use the opened file to read/write the information, and close the file.

#### 3.2.2.2 def servers::archiveSys::ArchiveSystem::put ( *self*, *keys*, *info*)

a simple method to put the info in the archive.

#### 3.2.2.3 def servers::archiveSys::ArchiveSystem::get ( *self*, *keys*, *ind* = 0)

get the indth line of info from the archive.

The documentation for this class was generated from the following file:

- servers/archiveSys.py

## 3.3 parkAui::plot::auiContainer::AuiContainer Class Reference

### 3.3.1 Detailed Description

A base container that supports AUI management.

The documentation for this class was generated from the following file:

- parkAui/plot/auiContainer.py

## 3.4 parkAui::plot::auiPanel::AuiPanel Class Reference

### 3.4.1 Detailed Description

A base panel to support AUI management.

The documentation for this class was generated from the following file:

- parkAui/plot/auiPanel.py

## 3.5 servers::cluster::Cluster Class Reference

### Public Member Functions

- def `__init__`
- def `config`
- def `getNames`
- def `getFullNames`
- def `getIPs`
- def `__repr__`

### Public Attributes

- **name**  
*The cluster name.*
- **nodes**  
*The list of cluster nodes.*
- **configFile**  
*The configure file of the cluster.*

#### 3.5.1 Detailed Description

A cluster of a group of computer node.

#### 3.5.2 Member Function Documentation

##### 3.5.2.1 `def servers::cluster::Cluster::__init__ ( self, name = CLUSTER_NAME, configFile = CLUSTER_CONFIG)`

Constructor.

A cluster has a name (name) and the computer nodes information is extracted from the configure file (configFile).

##### 3.5.2.2 `def servers::cluster::Cluster::config ( self, fname0 = None)`

Read the cluster configuration file and get information for each node.

##### 3.5.2.3 `def servers::cluster::Cluster::getNames ( self)`

Return the names of the nodes within the cluster.

##### 3.5.2.4 `def servers::cluster::Cluster::getFullNames ( self)`

Return the full names of the nodes within the cluster.

**3.5.2.5** `def servers::cluster::Cluster::getIPs ( self)`

Return the IP addresses of the nodes within the cluster.

**3.5.2.6** `def servers::cluster::Cluster::__repr__ ( self)`

Return the string representation of the cluster.

The documentation for this class was generated from the following file:

- servers/cluster.py

## 3.6 servers::cluster::ClusterController Class Reference

### Public Member Functions

- def `__init__`
- def `startServices`
- def `stopServices`
- def `getCluster`
- def `setService`
- def `getService`
- def `getNode`
- def `showps`
- def `__repr__`
- def `__del__`

### Public Attributes

- `cluster`  
*The cluster to be managed.*
- `service`  
*The service of the cluster.*
- `pid`  
*The pid for each running service.*

### 3.6.1 Detailed Description

The management class for the cluster.

### 3.6.2 Member Function Documentation

#### 3.6.2.1 def servers::cluster::ClusterController::\_\_init\_\_ ( self, configFile = CLUSTER\_CONFIG)

Constructor.  
Initialize a cluster to be managed.

#### 3.6.2.2 def servers::cluster::ClusterController::startServices ( self)

Start the service at each working node.

#### 3.6.2.3 def servers::cluster::ClusterController::stopServices ( self)

Stop the service at each working node.

**3.6.2.4** def servers::cluster::ClusterController::getCluster ( *self*)

Return the cluster to be managed.

**3.6.2.5** def servers::cluster::ClusterController::setService ( *self*, *service*)

Set the service for each node of the cluster

**3.6.2.6** def servers::cluster::ClusterController::getService ( *self*)

Return the service for each node of the cluster.

**3.6.2.7** def servers::cluster::ClusterController::getNode ( *self*, *name*)

get the node by its alias name

**3.6.2.8** def servers::cluster::ClusterController::showps ( *self*, *user* = None)

Show the process status at each node in the cluster.

**3.6.2.9** def servers::cluster::ClusterController::\_\_repr\_\_ ( *self*)

return the string representation.

**3.6.2.10** def servers::cluster::ClusterController::\_\_del\_\_ ( *self*)

Destructor.

The documentation for this class was generated from the following file:

- servers/cluster.py

## 3.7 servers::cluster::ClusterNode Class Reference

### Public Member Functions

- def `__init__`

### Public Attributes

- **name**  
*the alias name of the cluster node*
- **fullname**  
*the full name of the cluster node*
- **ip**  
*the ip address of the cluster node*
- **port**  
*port for the working service*
- **cpuNum**  
*number of cpu for the working node*

### 3.7.1 Detailed Description

A individual computer node in the cluster.

### 3.7.2 Member Function Documentation

#### 3.7.2.1 `def servers::cluster::ClusterNode::__init__ ( self, name, fullname, ip, port, cpuNum)`

Constructor.

A node has a short name (`name`), a full name (`fullname`) and a ip address (`ip`)

The documentation for this class was generated from the following file:

- `servers/cluster.py`

## 3.8 servers::cluster::ClusterService Class Reference

### Public Member Functions

- `def __init__`
- `def run`

### Public Attributes

- `cwd`  
*current working directory for the service.*
- `command`  
*the command name of the service*
- `shell`  
*the shell name to start the service*
- `logdir`  
*the directory for the logging file.*

### 3.8.1 Detailed Description

Manage the service at the working node.

### 3.8.2 Member Function Documentation

**3.8.2.1** `def servers::cluster::ClusterService::__init__ ( self, cwd = WORKING_SERVER_WORKING, command = WORKING_SERVER_CMD, shell = WORKING_SERVER_SHELL, logdir = WORKING_SERVER_LOGDIR)`

Constructor.

Specify the service in the working node, and its related working environment.

**3.8.2.2** `def servers::cluster::ClusterService::run ( self, node, port)`

Start the service at the working node.

The documentation for this class was generated from the following file:

- `servers/cluster.py`

### 3.9 parkAui::common::fittingConstrain::ConstrainParameter Class Reference

#### Public Member Functions

- def `__init__`

#### Public Attributes

- **model**  
*model name*
- **param**  
*parameter name*
- **attr**  
*attribute name*
- **flag**  
*flag to indicated whether it should be optimized, fixed or calcualted*
- **value**  
*current value*
- **range**  
*range of values to be optimized, valid when flag is optimized*
- **expression**  
*expression of the constrain, valid when flag is calculated*
- **errorbar**  
*error bar*

#### 3.9.1 Detailed Description

The table of the variables/parameter defintion.

#### 3.9.2 Member Function Documentation

##### 3.9.2.1 def parkAui::common::fittingConstrain::ConstrainParameter::\_\_init\_\_ (self)

Constructor. The variable name has three levels:  
`model_name.parameter_name.attribute_name`

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain.py

## 3.10 parkAui::common::fittingConstrain1::ConstrainParameter Class Reference

### Public Member Functions

- `def __init__`

### Public Attributes

- **modelName**  
*combined name: three levels of name*
- **model**  
*model name*
- **param**  
*parameter name*
- **attr**  
*attribute name*
- **flag**  
*flag to indicated whether it should be optimized, fixed or calcualted*
- **value**  
*current value*
- **range**  
*range of values to be optimized, valid when flag is optimized*
- **expression**  
*expression of the constrain, valid when flag is calculated*
- **errorbar**  
*error bar*

#### 3.10.1 Detailed Description

The data structure for each row of the table to show the parameters.

#### 3.10.2 Member Function Documentation

##### 3.10.2.1 `def parkAui::common::fittingConstrain1::ConstrainParameter::__init__ ( self)`

Constructor. The variable name has three levels:  
`model_name.parameter_name.attribute_name`

The documentation for this class was generated from the following file:

- `parkAui/common/fittingConstrain1.py`

## 3.11 parkAui::common::fittingConstrain3::ConstrainParameter Class Reference

### Public Member Functions

- `def __init__`

### Public Attributes

- **modelName**  
*combined name: three levels of name*
- **model**  
*model name*
- **param**  
*parameter name*
- **attr**  
*attribute name*
- **flag**  
*flag to indicated whether it should be optimized, fixed or calcualted*
- **value**  
*current value*
- **range**  
*range of values to be optimized, valid when flag is optimized*
- **expression**  
*expression of the constrain, valid when flag is calculated*
- **errorbar**  
*error bar*

#### 3.11.1 Detailed Description

The data structure for each row of the table to show the parameters.

#### 3.11.2 Member Function Documentation

##### 3.11.2.1 `def parkAui::common::fittingConstrain3::ConstrainParameter::__init__ ( self)`

Constructor. The variable name has three levels:  
`model_name.parameter_name.attribute_name`

The documentation for this class was generated from the following file:

- `parkAui/common/fittingConstrain3.py`

## 3.12 parkAui::common::fittingConstrain::ConstrainTable Class Reference

### 3.12.1 Detailed Description

Table to show/edit the parameter constrains

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain.py

## 3.13 parkAui::common::fittingConstrain1::ConstrainTable Class Reference

### 3.13.1 Detailed Description

Table to show/edit the parameter constrains

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain1.py

## 3.14 parkAui::common::fittingConstrain2::ConstrainTable Class Reference

### 3.14.1 Detailed Description

Table to show/edit the parameter constrains

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain2.py

## 3.15 parkAui::common::fittingConstrain3::ConstrainTable Class Reference

### 3.15.1 Detailed Description

Table to show/edit the parameter constrains

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain3.py

## 3.16 parkAui::common::fittingConstrainTable::ConstrainTable Class Reference

### 3.16.1 Detailed Description

Table to show/edit the parameter constrains

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrainTable.py

## 3.17 servers::queueFifo::FifoQueue Class Reference

### Public Member Functions

- def `__init__`
- def `qsize`
- def `empty`
- def `full`
- def `put`
- def `get`
- def `getid`
- def `show`
- def `showOut`
- def `remove`

### Public Attributes

- `maxsize`  
*the max size of the queue*
- `mutex`  
*the mutex to protect the multi-threading access*
- `queue`  
*the queue.*

### 3.17.1 Detailed Description

A First-In-First-Out queue.

### 3.17.2 Member Function Documentation

#### 3.17.2.1 def servers::queueFifo::FifoQueue::\_\_init\_\_ ( *self*, *maxsize*)

Initialize a queue object with a given maximum size.

If `maxsize` is  $\leq 0$ , the queue size is infinite.

#### 3.17.2.2 def servers::queueFifo::FifoQueue::qsize ( *self*)

Return the size of the queue.

#### 3.17.2.3 def servers::queueFifo::FifoQueue::empty ( *self*)

Return true if the queue is empty.

**3.17.2.4** def servers::queueFifo::FifoQueue::full ( *self*)

Return true if the queue is empty.

**3.17.2.5** def servers::queueFifo::FifoQueue::put ( *self*, *item*)

Put an item into the queue.  
If the queue is full, the header is popup, and  
the item is pushed in.

**3.17.2.6** def servers::queueFifo::FifoQueue::get ( *self*)

Get an item from the queue.  
The return is None if it is empty or no such items.

**3.17.2.7** def servers::queueFifo::FifoQueue::getid ( *self*, *pid*)

Get an item list from the queue by the ID.  
The return is None if it is empty or no such items.

**3.17.2.8** def servers::queueFifo::FifoQueue::show ( *self*)

Show the contents of the queue.

**3.17.2.9** def servers::queueFifo::FifoQueue::showOut ( *self*)

Show the contents of the queue.

**3.17.2.10** def servers::queueFifo::FifoQueue::remove ( *self*)

Put an item into the queue.  
If the queue is full, the header is popup, and  
the item is pushed in.

The documentation for this class was generated from the following file:

- servers/queueFifo.py

## 3.18 parkAui::common::fittingBuilder0::FittingBuilder Class Reference

### Public Member Functions

- def `__init__`

### Public Attributes

- **modelNb**  
*data source and model builder for the fitting*
- **constrain**  
*constrain*
- **settings**
- **job**

### Static Public Attributes

- tuple **modelConfig** = `getModelConfig()`

#### 3.18.1 Detailed Description

The base class for the model builder.

The documentation for this class was generated from the following file:

- `parkAui/common/fittingBuilder0.py`

## 3.19 parkAui::common::overviewFitting::FittingBuilder Class Reference

### 3.19.1 Detailed Description

The base class for the model builder.

The documentation for this class was generated from the following file:

- parkAui/common/overviewFitting.py

## 3.20 parkAui::common::overviewModelDataset::FittingBuilder Class Reference

### 3.20.1 Detailed Description

The base class for the model builder.

The documentation for this class was generated from the following file:

- parkAui/common/overviewModelDataset.py

## 3.21 parkAui::common::fittingBuilder::FittingBuilder Class Reference

### 3.21.1 Detailed Description

The base class for the model builder.

The documentation for this class was generated from the following file:

- parkAui/common/fittingBuilder.py

## 3.22 parkAui::common::fittingConstrain::FittingConstrain Class Reference

### 3.22.1 Detailed Description

Panel to edit the constrains and optimized variables.

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain.py

## 3.23 parkAui::common::fittingConstrain0::FittingConstrain Class Reference

### 3.23.1 Detailed Description

Panel to edit the constrains and optimized variables.

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain0.py

## 3.24 parkAui::common::fittingConstrain1::FittingConstrain Class Reference

### 3.24.1 Detailed Description

Panel to edit the constrains and optimized variables.

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain1.py

## 3.25 parkAui::common::fittingConstrain2::FittingConstrain Class Reference

### 3.25.1 Detailed Description

Panel to edit the constrains and optimized variables.

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain2.py

## 3.26 parkAui::common::fittingConstrain3::FittingConstrain Class Reference

### 3.26.1 Detailed Description

Panel to edit the constrains and optimized variables.

The documentation for this class was generated from the following file:

- `parkAui/common/fittingConstrain3.py`

## 3.27 parkAui::common::fittingConstrain::FittingConstrainGrid Class Reference

### 3.27.1 Detailed Description

The grid to show the constrains and variables

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain.py

## 3.28 parkAui::common::fittingConstrain0::FittingConstrainGrid Class Reference

### 3.28.1 Detailed Description

The grid to show the constrains and variables

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain0.py

## 3.29 parkAui::common::fittingConstrain1::FittingConstrainGrid Class Reference

### 3.29.1 Detailed Description

The grid to show the constrains and variables

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain1.py

## 3.30 parkAui::common::fittingConstrain2::FittingConstrainGrid Class Reference

### 3.30.1 Detailed Description

The grid to show the constrains and variables

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain2.py

## 3.31 parkAui::common::fittingConstrain3::FittingConstrainGrid Class Reference

### 3.31.1 Detailed Description

The grid to show the constrains and variables

The documentation for this class was generated from the following file:

- parkAui/common/fittingConstrain3.py

## 3.32 parkAui::common::fittingDatasetDataPanel::FittingDatasetDataPanel Class Reference

### 3.32.1 Detailed Description

A panel to view the data.

The documentation for this class was generated from the following file:

- parkAui/common/fittingDatasetDataPanel.py

## 3.33 parkAui::common::fittingDatasetEditor::FittingDatasetEditor Class Reference

### Public Member Functions

- def `__init__`
- def `GetOwnerManager`
- def `SetModel`
- def `GetModel`

### Public Attributes

- `viewer`
- `meta`
- `settings`
- `dataset`
- `model`

#### 3.33.1 Detailed Description

The abstract class to edit the dataset for the fitting.  
It is a dialog containing two panels: the top one is the real editor panel to add/remove data to/from the dataset, while the bottom one is the meta data panel to control how the data are combined together. The top panel and the bottom panel will both fire `ParkDatasetEvent`.

#### 3.33.2 Member Function Documentation

**3.33.2.1** `def parkAui::common::fittingDatasetEditor::FittingDatasetEditor::FittingDatasetEditor::FittingDatasetEditor ( self, parent, id = -1, pos = wx.DefaultPosition, size = DEFAULT_DIALOG_SIZE)`

Constructor.

**3.33.2.2** `def parkAui::common::fittingDatasetEditor::FittingDatasetEditor::GetOwnerManager ( self)`

Return the AUI manager.

The documentation for this class was generated from the following file:

- `parkAui/common/fittingDatasetEditor.py`

## 3.34 parkAui::common::fittingDatasetMetaPanel::FittingDatasetMetaPanel Class Reference

### 3.34.1 Detailed Description

A panel to edit the meta data information.

The documentation for this class was generated from the following file:

- parkAui/common/fittingDatasetMetaPanel.py

## 3.35 parkAui::common::fittingDatasetPanel::FittingDatasetPanel Class Reference

### 3.35.1 Detailed Description

The panel to show fitting data and theoretical results.

The documentation for this class was generated from the following file:

- parkAui/common/fittingDatasetPanel.py

## 3.36 parkAui::common::fittingDatasetPanel0::FittingDatasetPanel0 Class Reference

### 3.36.1 Detailed Description

The panel to show fitting data and theoretical results.

The documentation for this class was generated from the following file:

- parkAui/common/fittingDatasetPanel0.py

## **3.37 parkAui::common::fittingDatasetPanel1::FittingDatasetPanel1 Class Reference**

### **3.37.1 Detailed Description**

The panel to show fitting data and theoretical results.

The documentation for this class was generated from the following file:

- parkAui/common/fittingDatasetPanel1.py

## 3.38 parkAui::common::fittingOverview::FittingOverview Class Reference

### 3.38.1 Detailed Description

The base class for the model builder.

The documentation for this class was generated from the following file:

- parkAui/common/fittingOverview.py

## 3.39 parkAui::common::fittingOverview0::FittingOverview Class Reference

### 3.39.1 Detailed Description

The base class for the model builder.

The documentation for this class was generated from the following file:

- parkAui/common/fittingOverview0.py

## 3.40 parkAui::common::fittingPanel::FittingPanel Class Reference

### 3.40.1 Detailed Description

The super class of panels for data fitting

The documentation for this class was generated from the following file:

- parkAui/common/fittingPanel.py

## 3.41 parkAui::common::fittingParameter::FittingParameterPanel Class Reference

### Public Member Functions

- def `__init__`

### Public Attributes

- `paraNb`
- `job`

#### 3.41.1 Detailed Description

The panel to show the fitting parameters.

#### 3.41.2 Member Function Documentation

**3.41.2.1** `def parkAui::common::fittingParameter::FittingParameterPanel::__init__(self, parent, id = -1, pos = wx.DefaultPosition, size = DEFAULT_PANEL_SIZE)`

Constructor.

The documentation for this class was generated from the following file:

- `parkAui/common/fittingParameter.py`

## 3.42 parkAui::common::fittingParameter::FittingParameterTable Class Reference

### 3.42.1 Detailed Description

Table to be shown for fitting parameters.

The documentation for this class was generated from the following file:

- parkAui/common/fittingParameter.py

## 3.43 parkAui::common::fittingResidual::FittingResidual Class Reference

### 3.43.1 Detailed Description

The base class for the fitting residual.

The documentation for this class was generated from the following file:

- parkAui/common/fittingResidual.py

## 3.44 parkAui::common::fittingResidual1D::FittingResidual1D Class Reference

### 3.44.1 Detailed Description

The base class for the fitting residual.

The documentation for this class was generated from the following file:

- parkAui/common/fittingResidual1D.py

## 3.45 parkAui::common::fittingViewer::FittingViewer Class Reference

### Public Member Functions

- `def __init__`

### Public Attributes

- `viewerNb`  
*data source and model builder for the fitting*
- `job`

#### 3.45.1 Detailed Description

The base class for the fitting results viewer..

#### 3.45.2 Member Function Documentation

##### 3.45.2.1 `def parkAui::common::fittingViewer::FittingViewer::__init__ ( self, parent, id = -1, pos = wx.DefaultPosition, size = DEFAULT_PANEL_SIZE)`

Constructor.

The documentation for this class was generated from the following file:

- `parkAui/common/fittingViewer.py`

## 3.46 parkAui::common::fittingViewer1D::FittingViewer1D Class Reference

### 3.46.1 Detailed Description

A panel to view one-dimension fitting results.

The documentation for this class was generated from the following file:

- parkAui/common/fittingViewer1D.py

## 3.47 parkAui::builder::gauss::gaussData::GaussData Class Reference

### 3.47.1 Detailed Description

Gaussian data: two columns: X - Y

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussData.py

## 3.48 parkAui::builder::gauss::gaussDataset::GaussDataset Class Reference

### 3.48.1 Detailed Description

One dataset of Gaussian functions

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussDataset.py

## 3.49 parkAui::builder::gauss::gaussDatasetDataPanel::GaussDatasetDataPanel Class Reference

### 3.49.1 Detailed Description

A panel to view the Gaussian data.

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussDatasetDataPanel.py

## 3.50 parkAui::builder::gauss::gaussDatasetDataPanelP::GaussDatasetData Class Reference

### 3.50.1 Detailed Description

A panel to view the Gaussian data.

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussDatasetDataPanelP.py

## 3.51 parkAui::builder::gauss::gDatasetPanel::GaussDatasetPanel Class Reference

### 3.51.1 Detailed Description

The panel to show fitting data and theoretical results.

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gDatasetPanel.py

## 3.52 parkAui::builder::gauss::gaussDatasetViewer::GaussDatasetViewer Class Reference

### 3.52.1 Detailed Description

A panel to view the Gaussian data.

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussDatasetViewer.py

## 3.53 parkAui::builder::gauss::gaussDataset::GaussDataSource Class Reference

### 3.53.1 Detailed Description

The data source for Gaussian functions.

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussDataset.py

## 3.54 parkAui::builder::gauss::gaussData::GaussInstrumentData Class Reference

### 3.54.1 Detailed Description

Gaussian Instrument data.

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussData.py

## 3.55 parkAui::builder::gauss::gaussTheory::GaussParameter Class Reference

### 3.55.1 Detailed Description

The parameters ( $x_0, \sigma$ ) for the Gaussian function:  
 $f(x) = a_0 * \exp(-[(x-x_0)/\sigma]^2)$ ,  
whose default values are :  
 $a_0 = 1.0$  ,  $x_0 = 0.0$ ,  $\sigma = 1.0$

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussTheory.py

## 3.56 parkAui::builder::gauss::gaussTheory::GaussTheory Class Reference

### 3.56.1 Detailed Description

```
A simple example to indicate the implementation of a theory.  
The data is one array x[i], and the output is y[i]:  
y(i) = sum[ao[k]*exp(-(x[i]-x0[k])**2/sigma[k]**2)] for k
```

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussTheory.py

## 3.57 parkAui::builder::gauss::gaussXmlDataSource::GaussXmlData Class Reference

### Public Member Functions

- def `__init__`
- def `getDataArray`
- def `getOriginalDataArray`
- def `getInstrumentData`
- def `setOriginalScale`

#### 3.57.1 Detailed Description

Gaussian data: two columns: X - Y

#### 3.57.2 Member Function Documentation

**3.57.2.1** def  
`parkAui::builder::gauss::gaussXmlDataSource::GaussXmlData::getDataArray`  
( *self*)

Return the Gauss data array: [X,Y]

**3.57.2.2** def  
`parkAui::builder::gauss::gaussXmlDataSource::GaussXmlData::getOriginalDataArray`  
( *self*)

Return the Gauss data array: [X,Y]

**3.57.2.3** def  
`parkAui::builder::gauss::gaussXmlDataSource::GaussXmlData::getInstrumentData`  
( *self*)

Return the instrument data, one data has only one instrument data.

The documentation for this class was generated from the following file:

- `parkAui/builder/gauss/gaussXmlDataSource.py`

## 3.58 parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlData Class Reference

### Public Member Functions

- def `__init__`
- def `getDataArray`
- def `getOriginalDataArray`

#### 3.58.1 Detailed Description

Gaussian data: two columns: X - Y

#### 3.58.2 Member Function Documentation

**3.58.2.1** def  
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlData::getDataArray  
( *self*)

Return the Gauss data array: [X,Y]

**3.58.2.2** def  
parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlData::getOriginalDataArray  
( *self*)

Return the Gauss data array: [X,Y]

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussXmlDataSource0.py

## 3.59 parkAui::builder::gauss::gaussXmlDataSource::GaussXmlDataset Class Reference

### 3.59.1 Detailed Description

One dataset of Gaussian functions

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussXmlDataSource.py

## 3.60 parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlDataset Class Reference

### Public Member Functions

- def `__init__`

### 3.60.1 Detailed Description

One dataset of Gaussian functions

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussXmlDataSource0.py

## 3.61 parkAui::builder::gauss::gaussXmlDataSource::GaussXmlDataSource Class Reference

### Public Member Functions

- def `__init__`

#### 3.61.1 Detailed Description

The data source for Gaussian functions.

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussXmlDataSource.py

## 3.62 parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlDataSource0 Class Reference

### Public Member Functions

- def `__init__`

### 3.62.1 Detailed Description

The data source for Gaussian functions.

The documentation for this class was generated from the following file:

- parkAui/builder/gauss/gaussXmlDataSource0.py

## 3.63 parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlInstData Class Reference

### Public Member Functions

- def `__init__`
- def `setDefault`

#### 3.63.1 Detailed Description

Gaussian Instrument data.

The documentation for this class was generated from the following file:

- `parkAui/builder/gauss/gaussXmlDataSource0.py`

## 3.64 parkAui::builder::gauss::gaussXmlDataSource::GaussXmlInstData Class Reference

### Public Member Functions

- def `__init__`
- def `setDefault`

### 3.64.1 Detailed Description

Gaussian Instrument data.

The documentation for this class was generated from the following file:

- `parkAui/builder/gauss/gaussXmlDataSource.py`

## 3.65 parkAui::plot::plotPanel::GeneralPlotProperty Class Reference

### Public Member Functions

- def `__init__`

### Public Attributes

- `title`  
*graph title*
- `xtitle`  
*title for x axis*
- `ytitle`  
*title for y axis*

### 3.65.1 Detailed Description

Common properties for the plotting graph. This can be done via the PlotCanvas.

### 3.65.2 Member Function Documentation

#### 3.65.2.1 def parkAui::plot::plotPanel::GeneralPlotProperty::\_\_init\_\_ ( self)

Constructor.

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanel.py

## 3.66 servers::job::Job Class Reference

### Public Member Functions

- def `__init__`
- def `parseNode`
- def `__repr__`
- def `getTaskXmlString`

### Public Attributes

- **user**  
*user*
- **email**  
*user's email*
- **type**  
*job running type*
- **sid**  
*job session id*
- **gid**  
*job group id*
- **id**  
*job id*
- **name**  
*job name*
- **xmlInfo**  
*job information*
- **dep**  
*job dependency*
- **res**  
*job resource requirement.*
- **priority**  
*job priority*
- **status**  
*job status*
- **arriveTime**  
*job arrive time*

- **schedTime**  
*job scheduled time*
- **startTime**  
*job starting time*
- **runTime**  
*job running time*
- **waitid**  
*job waiting ids*
- **dest**  
*job running destination*
- **pid**  
*job running pid*
- **cnt**  
*job repeat count.*
- **cmd**  
*job command name.*

## Static Public Attributes

- **int JobID = 0L**  
*id for each job*

### 3.66.1 Detailed Description

The job class in the jobQueue

### 3.66.2 Member Function Documentation

#### 3.66.2.1 def servers::job::Job::\_\_init\_\_ ( *self*, *group*)

Constructor.

#### 3.66.2.2 def servers::job::Job::parseNode ( *self*, *jobNode*)

parse xml node

#### 3.66.2.3 def servers::job::Job::\_\_repr\_\_ ( *self*)

string representation of the job.

#### 3.66.2.4 `def servers::job::Job::getTaskXmlString ( self, node)`

Get the XML string for the related Task.

The documentation for this class was generated from the following file:

- `servers/job.py`

## 3.67 servers::queueSys::Job Class Reference

### Public Member Functions

- def `__init__`
- def `__gt__`
- def `__repr__`

### Public Attributes

- **status**  
*status*
- **priority**  
*priority*
- **arriveTime**  
*arrive time*
- **jid**  
*job id*

### Static Public Attributes

- int **ID0** = 0  
*jobID*

#### 3.67.1 Detailed Description

Simplified Job class.

#### 3.67.2 Member Function Documentation

##### 3.67.2.1 def servers::queueSys::Job:: `__init__` ( *self*, *js*, *priority*)

Constructor.

##### 3.67.2.2 def servers::queueSys::Job:: `__gt__` ( *self*, *other*)

Decide the order of the job.

### 3.67.2.3 `def servers::queueSys::Job::__repr__ ( self)`

String representation of the Job object.

The documentation for this class was generated from the following file:

- `servers/queueSys.py`

## 3.68 parkAui::common::jobOverviewPanel::JobOverviewPanel Class Reference

### 3.68.1 Detailed Description

The base class for the model builder.

The documentation for this class was generated from the following file:

- parkAui/common/jobOverviewPanel.py

## 3.69 parkAui::common::jobOverviewPanel0::JobOverviewPanel Class Reference

### 3.69.1 Detailed Description

The base class for the model builder.

The documentation for this class was generated from the following file:

- parkAui/common/jobOverviewPanel0.py

## 3.70 parkAui::common::jobPanel::JobPanel Class Reference

### 3.70.1 Detailed Description

A base panel to support AUI management.

The documentation for this class was generated from the following file:

- parkAui/common/jobPanel.py

## 3.71 servers::jobQueue::JobQueueException Class Reference

### Public Member Functions

- def `__init__`
- def `__str__`

### Public Attributes

- `value`  
*the error message.*

#### 3.71.1 Detailed Description

Exception while processing job queue.

#### 3.71.2 Member Function Documentation

##### 3.71.2.1 def servers::jobQueue::JobQueueException::\_\_init\_\_ ( *self*, *value*)

Constructor.

##### 3.71.2.2 def servers::jobQueue::JobQueueException::\_\_str\_\_ ( *self*)

string representation.

The documentation for this class was generated from the following file:

- servers/jobQueue.py

## 3.72 parkAui::common::jobTreeListPanel::JobTreeListPanel Class Reference

### 3.72.1 Detailed Description

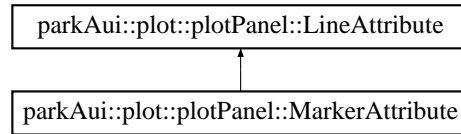
A tree to show the jobs.

The documentation for this class was generated from the following file:

- parkAui/common/jobTreeListPanel.py

### 3.73 parkAui::plot::plotPanel::LineAttribute Class Reference

Inheritance diagram for parkAui::plot::plotPanel::LineAttribute::



#### Public Member Functions

- def `__init__`

#### Public Attributes

- `color`
- `width`
- `style`
- `legend`

#### 3.73.1 Detailed Description

Attributes for PolyLine:

The documentation for this class was generated from the following file:

- `parkAui/plot/plotPanel.py`

## 3.74 servers::mapClient::MapClient Class Reference

### Public Member Functions

- def `__init__`
- def `collect_incoming_data`
- def `found_terminator`
- def `processReply`
- def `handle_read`
- def `writable`
- def `handle_write`
- def `handle_connect`
- def `handle_close`
- def `handle_expt`
- def `handle_error`
- def `killJob`
- def `getErrorMsg`

### Public Attributes

- `id`  
*client id*
- `name`  
*remote server name*
- `server`  
*local service server*
- `cpunum`  
*number of cpus*
- `qsys`  
*local job queue system*
- `qmsg`  
*local message queue system.*
- `works`
- `buffer`  
*buffer for reply message.*
- `reduces`  
*reduce functions*

### Static Public Attributes

- `int MapClientID = 0L`  
*id for each working client.*

### 3.74.1 Detailed Description

The client class of the working server.

### 3.74.2 Member Function Documentation

#### 3.74.2.1 `def servers::mapClient::MapClient::__init__ ( self, port, host, server, cpunum)`

Constructor.

#### 3.74.2.2 `def servers::mapClient::MapClient::collect_incoming_data ( self, data)`

Collect the data from the working node.

#### 3.74.2.3 `def servers::mapClient::MapClient::found_terminator ( self)`

Handle the data from the working node.

#### 3.74.2.4 `def servers::mapClient::MapClient::handle_read ( self)`

Handle the reading data from the working node.

#### 3.74.2.5 `def servers::mapClient::MapClient::writable ( self)`

Return true if it has some data sent to the working nodes.

#### 3.74.2.6 `def servers::mapClient::MapClient::handle_write ( self)`

Send request message to the working node.

#### 3.74.2.7 `def servers::mapClient::MapClient::handle_connect ( self)`

handle of the connection.

#### 3.74.2.8 `def servers::mapClient::MapClient::handle_close ( self)`

Close to the working node.

#### 3.74.2.9 `def servers::mapClient::MapClient::handle_expt ( self)`

Handle the exception.

**3.74.2.10** def servers::mapClient::MapClient::handle\_\_error ( *self*)

handle the error.

**3.74.2.11** def servers::mapClient::MapClient::killJob ( *self*, *jid*, *pid*)

Kill a job for the given pid.

**3.74.2.12** def servers::mapClient::MapClient::getErrorMsg ( *self*)

Return the error message for the the error and exception.

**3.74.3 Member Data Documentation****3.74.3.1 servers::mapClient::MapClient::works**

```
job queue sys self.jobqueue = server.getJobQueue() self.serviceIn = ServiceClientMapIn()
self.serviceOut = ServiceClientMapOut() current works.
```

The documentation for this class was generated from the following file:

- servers/mapClient.py

## 3.75 servers::mapServer::MapServer Class Reference

### Public Member Functions

- def `__init__`
- def `getToken`
- def `updateToken`
- def `getSysQueue`
- def `getMsgQueue`
- def `getReduceSys`
- def `tryConnects`
- def `handle_connect`
- def `handle_accept`
- def `handle_close`
- def `__del__`
- def `log`
- def `log_info`

### Public Attributes

- **controller**  
*the controller of the cluster*
- **servers**  
*the working servers*
- **clients**  
*the name-connection map for sending the working request.*
- **services**  
*the name-connection map for accept service request*
- **token**  
*ring-token so each node has the equal opportunity to be selected for the service*
- **qsys**  
*The job queue system.*
- **qmsg**  
*The message queue system.*
- **archive**  
*the archive system*
- **reduce**  
*the reduce function system*

### 3.75.1 Detailed Description

The mapper server at master node

### 3.75.2 Member Function Documentation

#### 3.75.2.1 def servers::mapServer::MapServer::\_\_init\_\_ ( *self*, *port*, *host*, *controller*)

Constructor.

#### 3.75.2.2 def servers::mapServer::MapServer::getToken ( *self*)

Get the token to run the working

#### 3.75.2.3 def servers::mapServer::MapServer::updateToken ( *self*)

Update the token to run the working

#### 3.75.2.4 def servers::mapServer::MapServer::getSysQueue ( *self*)

Return the Job system queue which is for job management.

#### 3.75.2.5 def servers::mapServer::MapServer::getMsgQueue ( *self*)

Return the Message queue for the messages sent to the client.

#### 3.75.2.6 def servers::mapServer::MapServer::getReduceSys ( *self*)

return the reduce functions.

#### 3.75.2.7 def servers::mapServer::MapServer::tryConnects ( *self*)

Try to connect to the work nodes for the real work.

#### 3.75.2.8 def servers::mapServer::MapServer::handle\_connect ( *self*)

Handle the connection.

#### 3.75.2.9 def servers::mapServer::MapServer::handle\_accept ( *self*)

Accept the service request from the clients.

**3.75.2.10** `def servers::mapServer::MapServer::handle_close ( self)`

Handle the close.

**3.75.2.11** `def servers::mapServer::MapServer::__del__ ( self)`

Clean-up operation.

**3.75.2.12** `def servers::mapServer::MapServer::log ( self, msg)`

Normal logging information.

**3.75.2.13** `def servers::mapServer::MapServer::log_info ( self, msg, type0 = 'info')`

General logging information for normal, exception, and error.

The documentation for this class was generated from the following file:

- servers/mapServer.py

## 3.76 servers::mapService::MapService Class Reference

### Public Member Functions

- def `__init__`
- def `collect_incoming_data`
- def `found_terminator`
- def `processRequest`
- def `hasMsg`
- def `handle_connect`
- def `handle_read`
- def `writable`
- def `handle_write`
- def `handle_close`
- def `handle_expt`
- def `handle_error`
- def `getErrorMsg`
- def `killJob`

### Public Attributes

- **id**  
*id of the service*
- **server**  
*the mapping service server*
- **qsys**  
*the job queue system of the service server*
- **qmsg**  
*the message queue system of the service server*
- **reduce**  
*the reduce function system*
- **msgSID**  
*The session ID that this service will listen for.*
- **buffer**  
*buffer for the incoming request.*

### Static Public Attributes

- **int MapServiceID = 0L**  
*serial number for each service.*

### 3.76.1 Detailed Description

A class running in the server to handle client request.

### 3.76.2 Member Function Documentation

#### 3.76.2.1 def servers::mapService::MapService::\_\_init\_\_ ( *self*, *sock*, *server*)

constructor.

#### 3.76.2.2 def servers::mapService::MapService::collect\_incoming\_data ( *self*, *data*)

Collect data from the client.

#### 3.76.2.3 def servers::mapService::MapService::found\_terminator ( *self*)

Process the data from the client.

#### 3.76.2.4 def servers::mapService::MapService::processRequest ( *self*, *cmd*)

Process the request from the client.

#### 3.76.2.5 def servers::mapService::MapService::hasMsg ( *self*)

Return true if there are messages sent to the client.

#### 3.76.2.6 def servers::mapService::MapService::handle\_connect ( *self*)

Handle the connection.

#### 3.76.2.7 def servers::mapService::MapService::handle\_read ( *self*)

Handle the read of service request from the socket

#### 3.76.2.8 def servers::mapService::MapService::writable ( *self*)

Return true if there are some messages need to be sent to the client.

#### 3.76.2.9 def servers::mapService::MapService::handle\_write ( *self*)

Send message to the client.

**3.76.2.10** def servers::mapService::MapService::handle\_close ( *self*)

handle the close of the service.

**3.76.2.11** def servers::mapService::MapService::handle\_expt ( *self*)

Handle the exception during the connection.

**3.76.2.12** def servers::mapService::MapService::handle\_error ( *self*)

handle the error during the connection

**3.76.2.13** def servers::mapService::MapService::getErrorMsg ( *self*)

utility function to get the error message.

**3.76.2.14** def servers::mapService::MapService::killJob ( *self*, *gid*)

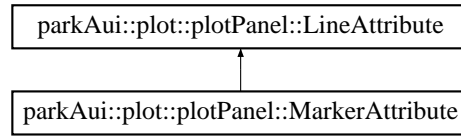
kill a job

The documentation for this class was generated from the following file:

- servers/mapService.py

## 3.77 parkAui::plot::plotPanel::MarkerAttribute Class Reference

Inheritance diagram for parkAui::plot::plotPanel::MarkerAttribute:



### Public Member Functions

- def `__init__`

### Public Attributes

- `color`
- `width`
- `size`
- `fillcolor`
- `fillstyle`
- `marker`
- `legend`

### 3.77.1 Detailed Description

Attributes for PolyMarker.

The documentation for this class was generated from the following file:

- `parkAui/plot/plotPanel.py`

## 3.78 parkAui::plot::matplotPanel::MatPlotAttribute Class Reference

### Public Member Functions

- `def __init__`

### Public Attributes

- `title`
- `xLabel`  
*title for x axis*
- `yLabel`  
*title for y axis*
- `legends`  
*legends*
- `drawLine`  
*whether to draw the line*
- `drawMarker`  
*whether to draw the marker*
- `showLegend`  
*whether to show the legend*
- `xlogscale`  
*whether to show x in log scale*
- `ylogscale`  
*whether to show y in log scale*
- `lineAttributes`  
*attributes for lines*
- `markerAttributes`  
*attributes for markers*

### 3.78.1 Detailed Description

Attributes for each graphics plotting.

### 3.78.2 Member Function Documentation

#### 3.78.2.1 `def parkAui::plot::matplotPanel::MatPlotAttribute::__init__ ( self)`

Constructor

### 3.78.3 Member Data Documentation

#### 3.78.3.1 parkAui::plot::matplotPanel::MatPlotAttribute::title

common properties self.general = GeneralPlotProperty() graph title

The documentation for this class was generated from the following file:

- parkAui/plot/matplotPanel.py

## 3.79 parkAui::plot::matplotPanelE3::MatPlotFrameE3 Class Reference

### Public Member Functions

- def `__init__`

### Public Attributes

- `panel`  
*The plotting panel.*

#### 3.79.1 Detailed Description

A frame to show 2D plotting without error bar.

#### 3.79.2 Member Function Documentation

##### 3.79.2.1 def parkAui::plot::matplotPanelE3::MatPlotFrameE3::\_\_init\_\_ ( *self*)

Constructor.

The documentation for this class was generated from the following file:

- parkAui/plot/matplotPanelE3.py

## 3.80 parkAui::plot::matplotPanelP::MatPlotFrameE3 Class Reference

### Public Member Functions

- def `__init__`
- def `init_plot_data`

### Public Attributes

- `panel`  
*The plotting panel.*

### 3.80.1 Detailed Description

A frame to show 2D plotting without error bar.

### 3.80.2 Member Function Documentation

#### 3.80.2.1 def parkAui::plot::matplotPanelP::MatPlotFrameE3::\_\_init\_\_ ( *self*)

Constructor.

#### 3.80.2.2 def parkAui::plot::matplotPanelP::MatPlotFrameE3::init\_plot\_data ( *self*)

Prepare data for plotting.

The documentation for this class was generated from the following file:

- `parkAui/plot/matplotPanelP.py`

## 3.81 parkAui::plot::matplotPanelE4::MatPlotFrameE4 Class Reference

### Public Member Functions

- def `__init__`
- def `__init__`

### Public Attributes

- `panel`  
*The plotting panel.*

#### 3.81.1 Detailed Description

A frame to show 2D plotting without error bar.

#### 3.81.2 Member Function Documentation

##### 3.81.2.1 def parkAui::plot::matplotPanelE4::MatPlotFrameE4::\_\_init\_\_ ( self)

Constructor.

##### 3.81.2.2 def parkAui::plot::matplotPanelE4::MatPlotFrameE4::\_\_init\_\_ ( self)

Constructor.

The documentation for this class was generated from the following file:

- parkAui/plot/matplotPanelE4.py

## 3.82 parkAui::plot::matplotPanelP::MatPlotFrameE4 Class Reference

### Public Member Functions

- def `__init__`
- def `init_plot_data`

### Public Attributes

- `panel`  
*The plotting panel.*

### 3.82.1 Detailed Description

A frame to show 2D plotting without error bar.

### 3.82.2 Member Function Documentation

#### 3.82.2.1 def parkAui::plot::matplotPanelP::MatPlotFrameE4::\_\_init\_\_ ( *self*)

Constructor.

#### 3.82.2.2 def parkAui::plot::matplotPanelP::MatPlotFrameE4::init\_plot\_data ( *self*)

Prepare data for plotting.

The documentation for this class was generated from the following file:

- parkAui/plot/matplotPanelP.py

## 3.83 parkAui::plot::matplotPanelF::MatPlotFrameF Class Reference

### Public Member Functions

- `def __init__`

### Public Attributes

- `panel`  
*The plotting panel.*

#### 3.83.1 Detailed Description

A frame to show 2D plotting without error bar.

#### 3.83.2 Member Function Documentation

##### 3.83.2.1 `def parkAui::plot::matplotPanelF::MatPlotFrameF::__init__ ( self)`

Constructor.

The documentation for this class was generated from the following file:

- `parkAui/plot/matplotPanelF.py`

## 3.84 parkAui::plot::matplotPanelP::MatPlotFrameF Class Reference

### Public Member Functions

- def `__init__`
- def `init_plot_data`

### Public Attributes

- `panel`  
*The plotting panel.*

### 3.84.1 Detailed Description

A frame to show 2D plotting without error bar.

### 3.84.2 Member Function Documentation

#### 3.84.2.1 def parkAui::plot::matplotPanelP::MatPlotFrameF::\_\_init\_\_ ( *self* )

Constructor.

#### 3.84.2.2 def parkAui::plot::matplotPanelP::MatPlotFrameF::init\_plot\_data ( *self* )

Prepare data for plotting.

The documentation for this class was generated from the following file:

- `parkAui/plot/matplotPanelP.py`

## 3.85 parkAui::plot::matplotPanelP::MatPlotFrameP Class Reference

### Public Member Functions

- def `__init__`
- def `init_plot_data`

### Public Attributes

- `panel`  
*The plotting panel.*

### 3.85.1 Detailed Description

A frame to show 2D plotting without error bar.

### 3.85.2 Member Function Documentation

#### 3.85.2.1 def parkAui::plot::matplotPanelP::MatPlotFrameP::\_\_init\_\_ ( *self*)

Constructor.

#### 3.85.2.2 def parkAui::plot::matplotPanelP::MatPlotFrameP::init\_plot\_data ( *self*)

Prepare data for plotting.

The documentation for this class was generated from the following file:

- `parkAui/plot/matplotPanelP.py`

## 3.86 parkAui::plot::matplotPanel::MatPlotPanel Class Reference

### 3.86.1 Detailed Description

A base panel that using `matplotlib` engineer to plot 2D plotting.

The documentation for this class was generated from the following file:

- `parkAui/plot/matplotPanel.py`

## 3.87 parkAui::plot::matplotPanelE3::MatPlotPanelE3 Class Reference

### 3.87.1 Detailed Description

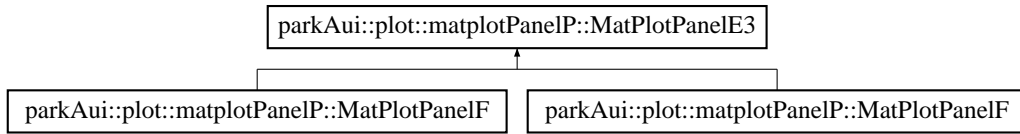
A panel to plot [x1, y1, dy1; x2, y2, dy2; ...] style data.

The documentation for this class was generated from the following file:

- parkAui/plot/matplotPanelE3.py

## 3.88 parkAui::plot::matplotPanelP::MatPlotPanelE3 Class Reference

Inheritance diagram for parkAui::plot::matplotPanelP::MatPlotPanelE3:



### 3.88.1 Detailed Description

A panel to plot [x1, y1, dy1; x2, y2, dy2; ...] style data.

The documentation for this class was generated from the following file:

- parkAui/plot/matplotPanelP.py

## 3.89 parkAui::plot::matplotPanelE4::MatPlotPanelE4 Class Reference

### 3.89.1 Detailed Description

A panel to plot [x1, y1, dx1, dy1;  
x2, y2, dx2, dy2; ...] style data.

The documentation for this class was generated from the following file:

- parkAui/plot/matplotPanelE4.py

## 3.90 parkAui::plot::matplotPanelP::MatPlotPanelE4 Class Reference

### 3.90.1 Detailed Description

A panel to plot [x1, y1, dx1, dy1;  
x2, y2, dx2, dy2; ...] style data.

The documentation for this class was generated from the following file:

- parkAui/plot/matplotPanelP.py

## 3.91 parkAui::plot::matplotPanelF::MatPlotPanelF Class Reference

### Public Member Functions

- def `__init__`

#### 3.91.1 Detailed Description

A panel to plot [x1, y1, y1', dy; x2, y2, y2, dy2; ...] style data.

#### 3.91.2 Member Function Documentation

##### 3.91.2.1 def parkAui::plot::matplotPanelF::MatPlotPanelF::`__init__` ( *self*, *parent*, *id* = -1, *pos* = wx.DefaultPosition, *size* = DEFAULT\_PANEL\_SIZE)

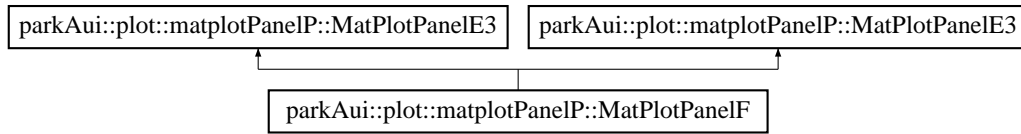
Constructor.

The documentation for this class was generated from the following file:

- parkAui/plot/matplotPanelF.py

## 3.92 parkAui::plot::matplotPanelP::MatPlotPanelF Class Reference

Inheritance diagram for parkAui::plot::matplotPanelP::MatPlotPanelF::



### Public Member Functions

- def `__init__`
- def `__init__`

#### 3.92.1 Detailed Description

A panel to plot [x1, y1, y1', dy; x2, y2, y2, dy2; ...] style data.

#### 3.92.2 Member Function Documentation

**3.92.2.1** def parkAui::plot::matplotPanelP::MatPlotPanelF:: `__init__` ( *self*, *parent*, *id* = -1, *pos* = wx.DefaultPosition, *size* = DEFAULT\_PANEL\_SIZE)

Constructor.

**3.92.2.2** def parkAui::plot::matplotPanelP::MatPlotPanelF:: `__init__` ( *self*, *parent*, *id* = -1, *pos* = wx.DefaultPosition, *size* = DEF\_PANEL\_SIZE)

Constructor.

The documentation for this class was generated from the following file:

- parkAui/plot/matplotPanelP.py

## 3.93 parkAui::plot::matplotPanelP::MatPlotPanelP Class Reference

### 3.93.1 Detailed Description

A panel to plot [x1, y1; x2, y2, ...] style data.

The documentation for this class was generated from the following file:

- parkAui/plot/matplotPanelP.py

## 3.94 parkAui::common::modelPage::ModelPage Class Reference

### Public Member Functions

- def `__init__`
- def `OnClose`
- def `GetOwnerManager`
- def `SetModel`
- def `GetModel`
- def `OnModelUpdated`
- def `OnDatasetUpdated`

### Public Attributes

- `datasetPanel`  
*data source for the fitting*
- `modelPanel`  
*model builder for the fitting*
- `settings`
- `model`

#### 3.94.1 Detailed Description

The page for model notebook.

#### 3.94.2 Member Function Documentation

##### 3.94.2.1 def parkAui::common::modelPage::ModelPage::OnModelUpdated ( *self*, *event*)

update of data view panel.

##### 3.94.2.2 def parkAui::common::modelPage::ModelPage::OnDatasetUpdated ( *self*, *event*)

No effect on the model builder.

The documentation for this class was generated from the following file:

- parkAui/common/modelPage.py

## 3.95 servers::msgQueue::MsgQueue Class Reference

### Public Member Functions

- def `__init__`
- def `putMsg`
- def `refMsg`
- def `empty`
- def `hasMsg`
- def `printInfo`

### Public Attributes

- `qmsg`  
*A list of message queue.*
- `maxsize`  
*The max. size of message queue.*

### 3.95.1 Detailed Description

A simple message queue.

### 3.95.2 Member Function Documentation

#### 3.95.2.1 def servers::msgQueue::MsgQueue::\_\_init\_\_ ( *self*, *maxsize*)

Constructor.

#### 3.95.2.2 def servers::msgQueue::MsgQueue::putMsg ( *self*, *msg*)

Put a message into the queue.

#### 3.95.2.3 def servers::msgQueue::MsgQueue::refMsg ( *self*, *cid*)

Reference a message in the queue.

#### 3.95.2.4 def servers::msgQueue::MsgQueue::empty ( *self*)

Return true if there is no message in the queue.

#### 3.95.2.5 def servers::msgQueue::MsgQueue::hasMsg ( *self*)

Return true if there are messages in the queue.

### 3.95.2.6 `def servers::msgQueue::MsgQueue::printInfo ( self)`

Print the message information.

The documentation for this class was generated from the following file:

- `servers/msgQueue.py`

## 3.96 servers::msgQueue::MsgQueueSys Class Reference

### Public Member Functions

- def `__init__`
- def `remove`
- def `clean`
- def `hasMsgs`
- def `hasMsg`
- def `putMsg`
- def `refMsg`
- def `printInfo`
- def `getKeys`

### Public Attributes

- `maxsize`  
*the max. size for each message queue.*

#### 3.96.1 Detailed Description

A simple message queue system.

#### 3.96.2 Member Function Documentation

##### 3.96.2.1 def servers::msgQueue::MsgQueueSys::\_\_init\_\_ ( *self*, *maxsize*)

constructor

##### 3.96.2.2 def servers::msgQueue::MsgQueueSys::remove ( *self*, *gid*)

Remove the message queue for the given gid.

##### 3.96.2.3 def servers::msgQueue::MsgQueueSys::clean ( *self*)

Remove all the message queues that have no message.

##### 3.96.2.4 def servers::msgQueue::MsgQueueSys::hasMsgs ( *self*)

Return true if there are messages in the queue.

##### 3.96.2.5 def servers::msgQueue::MsgQueueSys::hasMsg ( *self*, *gid*)

Return true if there are messages for the give gid.

**3.96.2.6** `def servers::msgQueue::MsgQueueSys::putMsg ( self, gid, msg)`

Put a message into the given gid message queue.

**3.96.2.7** `def servers::msgQueue::MsgQueueSys::refMsg ( self, gid, sid)`

Reference a message for the given gid and sid.

**3.96.2.8** `def servers::msgQueue::MsgQueueSys::printInfo ( self)`

print the message queue information.

**3.96.2.9** `def servers::msgQueue::MsgQueueSys::getKeys ( self)`

Get the related jobID of the message in the message queue system.

The documentation for this class was generated from the following file:

- servers/msgQueue.py

## 3.97 parkUI::networkThread::NetworkClient Class Reference

### 3.97.1 Detailed Description

A network client class to send/receive network data asynchronously. The output data are stored in outqueue, and the input data are handled by inhandler. The items in Queue must be castable to a string. This is the class used by the network thread. Not used directly by the user.

The documentation for this class was generated from the following file:

- parkUI/networkThread.py

## 3.98 parkAui::common::networkThreadNew::NetworkClient Class Reference

### 3.98.1 Detailed Description

A network client class to send/receive network data asynchronously. The output data are stored in outqueue, and the input data are handled by inhandler. The items in Queue must be castable to a string. This is the class used by the network thread. Not used directly by the user.

The documentation for this class was generated from the following file:

- parkAui/common/networkThreadNew.py

## 3.99 parkAui::common::networkThreadNew::NetworkEvent Class Reference

### Public Member Functions

- def `__init__`

### Public Attributes

- `msgtype`  
*message type*
- `msg`  
*Reply message.*

#### 3.99.1 Detailed Description

The network event sent to the main wxGUI thread

#### 3.99.2 Member Function Documentation

##### 3.99.2.1 def parkAui::common::networkThreadNew::NetworkEvent::\_\_init\_\_ ( *self, evtType, id, msgtype, msg = ""* )

Constructor. The NetworkEvent includes the reply message from the PARK server.

The documentation for this class was generated from the following file:

- parkAui/common/networkThreadNew.py

## 3.100 parkUI::networkThread::NetworkThread Class Reference

### 3.100.1 Detailed Description

The asynchronous network thread to handle the input/output network data. The win object must have a queue, which support `empty()`, `get()` functions. This is the class that the user will use.

The documentation for this class was generated from the following file:

- parkUI/networkThread.py

## 3.101 parkAui::common::networkThreadNew::NetworkThread Class Reference

### 3.101.1 Detailed Description

The asynchronous network thread to handle the input/output network data. The win object must have a queue, which support empty(), get() functions. This is the class that the user will use.

The documentation for this class was generated from the following file:

- parkAui/common/networkThreadNew.py

## 3.102 servers::queueNormal::NormalQueue Class Reference

### Public Member Functions

- def `__init__`
- def `show`
- def `showOut`
- def `search`
- def `change`
- def `remove`
- def `removeID`

### Public Attributes

- `maxsize`
- `queue`

#### 3.102.1 Detailed Description

Simple Priority queue.

#### 3.102.2 Member Function Documentation

##### 3.102.2.1 def servers::queueNormal::NormalQueue::\_\_init\_\_ ( *self*, *maxsize* = 0)

Initialize a queue object with a given maximum size.

If *maxsize* is  $\leq 0$ , the queue size is infinite.

##### 3.102.2.2 def servers::queueNormal::NormalQueue::show ( *self*)

Show the contents of the queue.

##### 3.102.2.3 def servers::queueNormal::NormalQueue::showOut ( *self*)

Show the contents of the queue.

##### 3.102.2.4 def servers::queueNormal::NormalQueue::search ( *self*, *eqfunc*, *keyargs*)

Search the jobs

##### 3.102.2.5 def servers::queueNormal::NormalQueue::change ( *self*, *changeF*, *kvals*)

Change the job property

**3.102.2.6** def servers::queueNormal::NormalQueue::remove ( *self*, *equfunc*, *keyargs*)

Remove the job.

**3.102.2.7** def servers::queueNormal::NormalQueue::removeID ( *self*, *id*)

Remove the job by its id.

The documentation for this class was generated from the following file:

- servers/queueNormal.py

## 3.103 parkAui::xmlUtil::optimizer::Optimizer Class Reference

### 3.103.1 Detailed Description

The interface for all implementations of optimizer.  
The optimizer gets the optimizer control parameters from the controller, and other information from the multiplexor. The subclass of Optimizer must at least implement `_optimize()`, which perform the real optimization and set the results to be returns.

The documentation for this class was generated from the following file:

- `parkAui/xmlUtil/optimizer.py`

## 3.104 parkAui::parkFrame::ParkApp Class Reference

### 3.104.1 Detailed Description

Client application for PARK client

The documentation for this class was generated from the following file:

- parkAui/parkFrame.py

## 3.105 parkAui::parkApp::ParkApp Class Reference

### 3.105.1 Detailed Description

Application for PARK client

The documentation for this class was generated from the following file:

- parkAui/parkApp.py

## 3.106 parkAui::common::datasetEvent::ParkDatasetEvent Class Reference

### 3.106.1 Detailed Description

The Dataset changed event.

The documentation for this class was generated from the following file:

- parkAui/common/datasetEvent.py

## 3.107 parkAui::parkFrame::ParkFrame Class Reference

### 3.107.1 Detailed Description

The frame to do the fitting provide be PARK

The documentation for this class was generated from the following file:

- parkAui/parkFrame.py

## 3.108 parkAui::common::jobEvent::ParkJobEvent Class Reference

### 3.108.1 Detailed Description

The job changed event.

The documentation for this class was generated from the following file:

- parkAui/common/jobEvent.py

## 3.109 parkAui::common::modelEvent::ParkModelEvent Class Reference

### 3.109.1 Detailed Description

The MODEL changed event.

The documentation for this class was generated from the following file:

- parkAui/common/modelEvent.py

## 3.110 parkAui::common::parkOptimizerPanel::ParkOptimizerPanel Class Reference

### 3.110.1 Detailed Description

default size for fitting controller panel `DEFAULT_PANEL_SIZE = (220, 180)`

Controller panel for data fitting service.

The documentation for this class was generated from the following file:

- `parkAui/common/parkOptimizerPanel.py`

## 3.111 parkAui::common::modelEvent::ParkParameterEvent Class Reference

### 3.111.1 Detailed Description

The value of parameter changed event.

The documentation for this class was generated from the following file:

- parkAui/common/modelEvent.py

## 3.112 parkAui::common::parkPatternPanel::ParkPatternData Class Reference

### 3.112.1 Detailed Description

The class to represent the map/reduce pattern request data

The documentation for this class was generated from the following file:

- parkAui/common/parkPatternPanel.py

## 3.113 parkUI::reply::ParkReply Class Reference

### 3.113.1 Detailed Description

A network client class to send/receive network data asynchronously. The output data are stored in outqueue, and the input data are handled by inhandler. The items in Queue must be castable to a string. This is the class used by the network thread. Not used directly by the user.

The documentation for this class was generated from the following file:

- parkUI/reply.py

## 3.114 parkUI::replyEcho::ParkReplyEcho Class Reference

### 3.114.1 Detailed Description

A network client class to send/receive network data asynchronously. The output data are stored in outqueue, and the input data are handled by inhandler. The items in Queue must be castable to a string. This is the class used by the network thread. Not used directly by the user.

The documentation for this class was generated from the following file:

- parkUI/replyEcho.py

## 3.115 parkAui::common::replyEvent::ParkReplyEvent Class Reference

### Public Member Functions

- def `__init__`
- def `SetReply`
- def `GetReply`
- def `GetReplyType`
- def `IsSubmitReply`
- def `SetSubmitReply`
- def `IsStartReply`
- def `SetStartReply`
- def `IsRunningReply`
- def `SetRunningReply`
- def `IsFinishedReply`
- def `SetFinishedReply`
- def `IsResultsReply`
- def `SetResultsReply`

### Public Attributes

- `reply`  
*the park model that has been changed.*
- `replyType`  
*change type: ADD, REMOVE, UPDATE*

#### 3.115.1 Detailed Description

The reply message event.

#### 3.115.2 Member Function Documentation

**3.115.2.1** def parkAui::common::replyEvent::ParkReplyEvent:: `__init__` ( *self*, *evtType*, *id*, *reply*, *replyType* = REPLY\_FINISHED)

Constructor.

**3.115.2.2** def parkAui::common::replyEvent::ParkReplyEvent:: `SetReply` ( *self*, *reply*)

set the reply.

**3.115.2.3** def parkAui::common::replyEvent::ParkReplyEvent:: `GetReply` ( *self*)

return the reply

**3.115.2.4** `def parkAui::common::replyEvent::ParkReplyEvent::IsSubmitReply ( self )`

return True if the reply is for the previous submit command.

**3.115.2.5** `def parkAui::common::replyEvent::ParkReplyEvent::SetSubmitReply ( self )`

set the event is the reply from the previous submit command.

**3.115.2.6** `def parkAui::common::replyEvent::ParkReplyEvent::IsStartReply ( self )`

return True if the reply is for the job that starts to run.

**3.115.2.7** `def parkAui::common::replyEvent::ParkReplyEvent::SetStartReply ( self )`

set the event is the reply to indicate that the job starts to run.

**3.115.2.8** `def parkAui::common::replyEvent::ParkReplyEvent::IsRunningReply ( self )`

return True if the reply is for the job that is running.

**3.115.2.9** `def parkAui::common::replyEvent::ParkReplyEvent::SetRunningReply ( self )`

set the event is the reply to indicate that the job is running.

**3.115.2.10** `def parkAui::common::replyEvent::ParkReplyEvent::IsFinishedReply ( self )`

return True if the reply is for the job that is finished.

**3.115.2.11** `def parkAui::common::replyEvent::ParkReplyEvent::SetFinishedReply ( self )`

set the event is the reply to indicate that the job is finished.

**3.115.2.12** `def parkAui::common::replyEvent::ParkReplyEvent::IsResultsReply ( self )`

return True if the reply is for the job with the results.

**3.115.2.13** `def parkAui::common::replyEvent::ParkReplyEvent::SetResultsReply (`  
`self)`

set the event is the reply to indicate that results are provided.

The documentation for this class was generated from the following file:

- `parkAui/common/replyEvent.py`

## 3.116 parkAui::plot::plotPanel::PlotAttribute Class Reference

### Public Member Functions

- `def __init__`

### Public Attributes

- `title`
- `xLabel`  
*title for x axis*
- `yLabel`  
*title for y axis*
- `legends`  
*legends*
- `drawLine`  
*whether to draw the line*
- `drawMarker`  
*whether to draw the marker*
- `lineAttributes`
- `markerAttributes`  
*attributes for markers*

### 3.116.1 Detailed Description

Attributes for each graphics plotting.

### 3.116.2 Member Function Documentation

#### 3.116.2.1 `def parkAui::plot::plotPanel::PlotAttribute::__init__ ( self)`

Constructor

### 3.116.3 Member Data Documentation

#### 3.116.3.1 `parkAui::plot::plotPanel::PlotAttribute::title`

common properties `self.general = GeneralPlotProperty()` graph title

### 3.116.3.2 parkAui::plot::plotPanel::PlotAttribute::lineAttributes

whether to show the legend self.showLegend = True attributes for lines

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanel.py

## 3.117 parkAui::plot::polyErrorbar::PlotFrame Class Reference

simple testing

### Public Member Functions

- def `__init__`

### Public Attributes

- `panel3`  
*The plotting panel.*
- `panel4`  
*The plotting panel.*

### 3.117.1 Detailed Description

simple testing

A frame to show 2D plotting without error bar.

### 3.117.2 Member Function Documentation

#### 3.117.2.1 def parkAui::plot::polyErrorbar::PlotFrame::\_\_init\_\_ ( self)

Constructor.

The documentation for this class was generated from the following file:

- parkAui/plot/polyErrorbar.py

## 3.118 parkAui::plot::plotPanelE3::PlotFrameE3 Class Reference

### Public Member Functions

- def `__init__`
- def `init_plot_data`

### Public Attributes

- `panel`  
*The plotting panel.*

### 3.118.1 Detailed Description

A frame to show 2D plotting without error bar.

### 3.118.2 Member Function Documentation

#### 3.118.2.1 def parkAui::plot::plotPanelE3::PlotFrameE3::\_\_init\_\_ ( *self* )

Constructor.

#### 3.118.2.2 def parkAui::plot::plotPanelE3::PlotFrameE3::init\_plot\_data ( *self* )

Prepare data for plotting.

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelE3.py

## 3.119 parkAui::plot::plotPanelE4::PlotFrameE4 Class Reference

### 3.119.1 Detailed Description

A frame to show 2D plotting without error bar.

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelE4.py

## 3.120 parkAui::plot::plotPanelEF::PlotFrameEF Class Reference

### Public Member Functions

- def `__init__`
- def `init_plot_data`

### Public Attributes

- `panel`  
*The plotting panel.*

### 3.120.1 Detailed Description

A frame to show 2D plotting without error bar.

### 3.120.2 Member Function Documentation

#### 3.120.2.1 def parkAui::plot::plotPanelEF::PlotFrameEF::\_\_init\_\_ ( self)

Constructor.

#### 3.120.2.2 def parkAui::plot::plotPanelEF::PlotFrameEF::init\_plot\_data ( self)

Prepare data for plotting. [x,y,dy,y']

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelEF.py

## 3.121 parkAui::plot::plotPanelF::PlotFrameF Class Reference

### Public Member Functions

- def `__init__`
- def `init_plot_data`

### Public Attributes

- `panel`  
*The plotting panel.*

#### 3.121.1 Detailed Description

A frame to show 2D plotting without error bar.

#### 3.121.2 Member Function Documentation

##### 3.121.2.1 def parkAui::plot::plotPanelF::PlotFrameF::\_\_init\_\_ ( *self* )

Constructor.

##### 3.121.2.2 def parkAui::plot::plotPanelF::PlotFrameF::init\_plot\_data ( *self* )

Prepare data for plotting. [x,y,dy,y']

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelF.py

## 3.122 parkAui::plot::plotPanelP::PlotFrameP Class Reference

### Public Member Functions

- def `__init__`
- def `init_plot_data`
- def `init_plot_data0`

### Public Attributes

- `panel`  
*The plotting panel.*

#### 3.122.1 Detailed Description

A frame to show 2D plotting without error bar.

#### 3.122.2 Member Function Documentation

##### 3.122.2.1 def parkAui::plot::plotPanelP::PlotFrameP::\_\_init\_\_ ( self)

Constructor.

##### 3.122.2.2 def parkAui::plot::plotPanelP::PlotFrameP::init\_plot\_data ( self)

Prepare data for plotting.

##### 3.122.2.3 def parkAui::plot::plotPanelP::PlotFrameP::init\_plot\_data0 ( self)

Prepare data for plotting.

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelP.py

## 3.123 parkAui::plot::plotPanelR::PlotFrameR Class Reference

### Public Member Functions

- def `__init__`
- def `init_plot_data`

### Public Attributes

- `panel`  
*The plotting panel.*

#### 3.123.1 Detailed Description

A frame to show 2D plotting without error bar.

#### 3.123.2 Member Function Documentation

##### 3.123.2.1 def parkAui::plot::plotPanelR::PlotFrameR::\_\_init\_\_ ( self)

Constructor.

##### 3.123.2.2 def parkAui::plot::plotPanelR::PlotFrameR::init\_plot\_data ( self)

Prepare data for plotting. [x,y,dy,y']

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelR.py

## 3.124 parkAui::plot::plotPanelR2::PlotFrameR2 Class Reference

### Public Member Functions

- def `__init__`
- def `init_plot_data`

### Public Attributes

- `panel`  
*The plotting panel.*

### 3.124.1 Detailed Description

A frame to show 2D plotting without error bar.

### 3.124.2 Member Function Documentation

#### 3.124.2.1 def parkAui::plot::plotPanelR2::PlotFrameR2::\_\_init\_\_ ( self)

Constructor.

#### 3.124.2.2 def parkAui::plot::plotPanelR2::PlotFrameR2::init\_plot\_data ( self)

Prepare data for plotting. [x,y,dy,y']

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelR2.py

## 3.125 parkAui::plot::plotPanel::PlotPanel Class Reference

### Public Member Functions

- def SetLogScale

#### 3.125.1 Detailed Description

A base panel that using wx.lib.plot engineer  
to plot simple 2D plotting.

#### 3.125.2 Member Function Documentation

##### 3.125.2.1 def parkAui::plot::plotPanel::PlotPanel::SetLogScale ( *self*, *logscale* = True)

set to log scale

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanel.py

## 3.126 parkAui::plot::plotPanelE3::PlotPanelE3 Class Reference

### Public Member Functions

- def `__init__`
- def `SetYErrorbar`
- def `IsYErrorbar`
- def `GetRepeatUnit`

#### 3.126.1 Detailed Description

A panel to plot [x1, y1, dy1; x2, y2, dy2; ...] style data.

#### 3.126.2 Member Function Documentation

##### 3.126.2.1 def parkAui::plot::plotPanelE3::PlotPanelE3::SetYErrorbar ( *self*, *ybar* = True)

True for y error bar

##### 3.126.2.2 def parkAui::plot::plotPanelE3::PlotPanelE3::IsYErrorbar ( *self*)

Return true if for y error bar

##### 3.126.2.3 def parkAui::plot::plotPanelE3::PlotPanelE3::GetRepeatUnit ( *self*)

Return the repeat unit.

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelE3.py

## 3.127 parkAui::plot::plotPanelE4::PlotPanelE4 Class Reference

### Public Member Functions

- def `__init__`
- def `GetRepeatUnit`

### 3.127.1 Detailed Description

A panel to plot [x1, y1, dx1, dy1;  
x2, y2, dx2, dy2; ...] style data.

### 3.127.2 Member Function Documentation

#### 3.127.2.1 def parkAui::plot::plotPanelE4::PlotPanelE4::GetRepeatUnit ( *self*)

Return the repeat unit.

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelE4.py

## 3.128 parkAui::plot::plotPanelEF::PlotPanelEF Class Reference

### Public Member Functions

- def `__init__`
- def `GetRepeatUnit`

### 3.128.1 Detailed Description

A panel to plot [x1, y1, dy1, y1'; x2, y2, dy2, y2'; ...] style data.  
Both y1,y1' have or have not legend, line.

### 3.128.2 Member Function Documentation

#### 3.128.2.1 def parkAui::plot::plotPanelEF::PlotPanelEF::GetRepeatUnit ( *self*)

Return the repeat unit.

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelEF.py

## 3.129 parkAui::plot::plotPanelF::PlotPanelF Class Reference

### Public Member Functions

- def `__init__`
- def `GetRepeatUnit`

### 3.129.1 Detailed Description

A panel to plot [x1, y1, dy1, y1'; x2, y2, dy2, y2'; ...] style data.  
Both y1,y1' have or have not legend, line.

### 3.129.2 Member Function Documentation

#### 3.129.2.1 def parkAui::plot::plotPanelF::PlotPanelF::GetRepeatUnit ( *self*)

Return the repeat unit.

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelF.py

## 3.130 parkAui::plot::plotPanelP::PlotPanelP Class Reference

### Public Member Functions

- def `__init__`
- def `GetRepeatUnit`

#### 3.130.1 Detailed Description

A panel to plot [x1, y1; x2, y2, ...] style data.

#### 3.130.2 Member Function Documentation

**3.130.2.1** def parkAui::plot::plotPanelP::PlotPanelP::`__init__` ( *self*, *parent*, *id* = -1, *pos* = wx.DefaultPosition, *size* = DEFAULT\_PANEL\_SIZE)

Constructor.

**3.130.2.2** def parkAui::plot::plotPanelP::PlotPanelP::`GetRepeatUnit` ( *self*)

Return the repeat unit.

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelP.py

## 3.131 parkAui::plot::plotPanelR::PlotPanelR Class Reference

### Public Member Functions

- def `__init__`
- def `GetRepeatUnit`

#### 3.131.1 Detailed Description

```
A panel to plot residual of [x1, y1, dy1, y1';
x2, y2, dy2, y2'; ...] style data:
xi ~ (y1-y1')/dy1:
y1, dy1 are experimental data,
y1' are the theoretical data
Both y1,y1' have or have not legend, line.
x1 cannot be None
if y1 is None, plot (x1, y1')
if dy1 is None, plot (x1, y1-y1')
if y1, dy1 is None, plot (x1, y1)
if y1' is None, plot errorbar (x1, y1, dy1)
```

#### 3.131.2 Member Function Documentation

##### 3.131.2.1 def parkAui::plot::plotPanelR::PlotPanelR::GetRepeatUnit ( *self*)

Return the repeat unit.

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelR.py

## 3.132 parkAui::plot::plotPanelR2::PlotPanelR2 Class Reference

### 3.132.1 Detailed Description

A panel to plot residual of [x1, y1, dy1, y1';  
x2, y2, dy2, y2'; ...] style data, where  
[xi,yi,dyi], ... are assigned by experimental data  
and yi are assigned by the theory data

The documentation for this class was generated from the following file:

- parkAui/plot/plotPanelR2.py

## 3.133 parkAui::plot::polyErrorbar::PolyErrorbar Class Reference

### 3.133.1 Detailed Description

Class to plot errorbar. Adapted from wx.lib.plot

The documentation for this class was generated from the following file:

- parkAui/plot/polyErrorbar.py

## 3.134 servers::queuePriority::PriorityQueue Class Reference

### Public Member Functions

- def `__init__`
- def `show`
- def `showOut`
- def `search`
- def `change`
- def `remove`
- def `removeID`

### Public Attributes

- `maxsize`
- `queue`

#### 3.134.1 Detailed Description

A priority queue.

#### 3.134.2 Member Function Documentation

##### 3.134.2.1 def servers::queuePriority::PriorityQueue::\_\_init\_\_ ( *self*, *maxsize* = 0)

Initialize a queue object with a given maximum size.

If *maxsize* is  $\leq 0$ , the queue size is infinite.

##### 3.134.2.2 def servers::queuePriority::PriorityQueue::show ( *self*)

Show the contents of the queue.

##### 3.134.2.3 def servers::queuePriority::PriorityQueue::showOut ( *self*)

Show the contents of the queue.

##### 3.134.2.4 def servers::queuePriority::PriorityQueue::search ( *self*, *eqfunc*, *keyargs*)

Searching a given job.

##### 3.134.2.5 def servers::queuePriority::PriorityQueue::change ( *self*, *changeF*, *kvals*)

Change the job's contents.

**3.134.2.6** `def servers::queuePriority::PriorityQueue::remove ( self, equfunc,  
keyargs)`

Remove the given jobs.

**3.134.2.7** `def servers::queuePriority::PriorityQueue::removeID ( self, jobID)`

Remove a job by its id.

The documentation for this class was generated from the following file:

- servers/queuePriority.py

## 3.135 servers::queueSys::QueueSys Class Reference

### Public Member Functions

- def `__init__`
- def `put`
- def `hasJobs`
- def `get`
- def `activate`
- def `remove`
- def `putFinishQ`
- def `putRunQ`
- def `getRunQ`
- def `isRunQempty`
- def `putOutput`
- def `getOutputQ`
- def `delOutputQ`
- def `showAll`
- def `empty`

### Public Attributes

- `maxsizes`  
*the max size for each job queue*
- `schedQs`  
*the queue for the schduled jobs*
- `waitQ`  
*the queue for the wating jobs*
- `runQ`  
*the queue for the running jobs*
- `finishQ`  
*the queue for the finished jobs*
- `outQs`  
*the listeners for the message.*
- `cnt`  
*the job status*

### 3.135.1 Detailed Description

The class to handle the Job Queue System

## 3.135.2 Member Function Documentation

### 3.135.2.1 def servers::queueSys::QueueSys::\_\_init\_\_ ( *self*, *maxsizes*)

Initialize a queue object with a given maximum size.  
nsched is the number of Priority Queues for scheduled jobs  
maxsizes is a integer list to specify the maxsize for  
scheduled job queues, the waiting job queue, the running  
job queue and finished job queue.

### 3.135.2.2 def servers::queueSys::QueueSys::put ( *self*, *job*)

Put a job in the queue system.

### 3.135.2.3 def servers::queueSys::QueueSys::hasJobs ( *self*)

Return True if it has more works that need to be done.

### 3.135.2.4 def servers::queueSys::QueueSys::get ( *self*)

Extract one job and submit it to the working node.

### 3.135.2.5 def servers::queueSys::QueueSys::activate ( *self*, *activeID*)

Activate the jobs in waiting Queue, and put in scheduled Queue

### 3.135.2.6 def servers::queueSys::QueueSys::remove ( *self*, *jobID*)

Remove a job from the queue system.

### 3.135.2.7 def servers::queueSys::QueueSys::putFinishQ ( *self*, *job*)

Put a job in the finished Queue

### 3.135.2.8 def servers::queueSys::QueueSys::putRunQ ( *self*, *job*)

put a job into the running queues

### 3.135.2.9 def servers::queueSys::QueueSys::getRunQ ( *self*, *jobID* = None)

Get a job from the running job queues.

**3.135.2.10** `def servers::queueSys::QueueSys::isRunQempty ( self)`

Return True if the running job queue is empty.

**3.135.2.11** `def servers::queueSys::QueueSys::putOutput ( self, name, job)`

Put a message into the message queue.

**3.135.2.12** `def servers::queueSys::QueueSys::getOutputQ ( self, name)`

Get a message from the message queue.

**3.135.2.13** `def servers::queueSys::QueueSys::delOutputQ ( self, name)`

Remove a message from the message queue.

**3.135.2.14** `def servers::queueSys::QueueSys::showAll ( self)`

Show the information about the queue system.

**3.135.2.15** `def servers::queueSys::QueueSys::empty ( self)`

Return True if scheduling job queue is empty.

The documentation for this class was generated from the following file:

- servers/queueSys.py

## 3.136 servers::replySession::ReplySession Class Reference

### Public Member Functions

- def `__init__`
- def `reset`
- def `parseString`
- def `__repr__`

### Public Attributes

- `id`  
*jobid*
- `gid`  
*group id*
- `sid`  
*session id*
- `pid`  
*process id*
- `code`  
*exit cod*
- `msg`  
*reply message*
- `status`  
*job status*
- `chisq`  
*chisq for data fitting.*

### 3.136.1 Detailed Description

A reply session.

### 3.136.2 Member Function Documentation

#### 3.136.2.1 def servers::replySession::ReplySession::\_\_init\_\_ ( *self*)

Constructor.

#### 3.136.2.2 def servers::replySession::ReplySession::reset ( *self*)

Reset to default values.

**3.136.2.3** `def servers::replySession::ReplySession::parseString ( self, xmlStr, indent = None)`

parse a xml string

**3.136.2.4** `def servers::replySession::ReplySession::__repr__ ( self)`

String representation of reply session

The documentation for this class was generated from the following file:

- servers/replySession.py

## 3.137 servers::service::Service Class Reference

### Public Member Functions

- def `__init__`
- def `collect_incoming_data`
- def `found_terminator`
- def `handle_read`
- def `handle_write`
- def `writable`
- def `handle_close`
- def `handle_expt`
- def `handle_error`
- def `getErrorMsg`

### Public Attributes

- **server**  
*The connection that accept the working service request.*
- **queue**  
*The job queue in the working server.*
- **serviceOut**  
*The handler for the service reply.*
- **buffer**  
*the buffer for the incoming service request.*

### 3.137.1 Detailed Description

The service running on working node to handle service request

### 3.137.2 Member Function Documentation

#### 3.137.2.1 def servers::service::Service::\_\_init\_\_ ( self, sock, server)

Constructor.

#### 3.137.2.2 def servers::service::Service::collect\_incoming\_data ( self, data)

collect the incoming working service request.

#### 3.137.2.3 def servers::service::Service::found\_terminator ( self)

handle the working service request

**3.137.2.4** `def servers::service::Service::handle_read ( self)`

Handle the reading of working service request.

**3.137.2.5** `def servers::service::Service::handle_write ( self)`

Handle the writing of the working service reply.

**3.137.2.6** `def servers::service::Service::writable ( self)`

Return True if there is any reply message that needs to be sent

**3.137.2.7** `def servers::service::Service::handle_close ( self)`

Handle the closing of the connection.

**3.137.2.8** `def servers::service::Service::handle_expt ( self)`

Handle the exception during the connection.

**3.137.2.9** `def servers::service::Service::handle_error ( self)`

Handle the error during the connection.

**3.137.2.10** `def servers::service::Service::getErrorMsg ( self)`

Get the error message while error or exception occurs.

The documentation for this class was generated from the following file:

- servers/service.py

## 3.138 servers::serviceClientMap::ServiceClientMapIn Class Reference

### Public Member Functions

- def `__init__`
- def `parse`
- def `getUser`
- def `getMsg`
- def `getJobID`
- def `getSessionID`
- def `getGroupID`
- def `getExitCode`
- def `hasExitCode`
- def `getStatus`
- def `getChisq`
- def `getReply`

### Public Attributes

- `session`  
*reply session*

#### 3.138.1 Detailed Description

A class to receive reply from the working node.

#### 3.138.2 Member Function Documentation

##### 3.138.2.1 def servers::serviceClientMap::ServiceClientMapIn::\_\_init\_\_ ( *self*)

Constructor.

##### 3.138.2.2 def servers::serviceClientMap::ServiceClientMapIn::parse ( *self*, *cmd*)

parse the reply.

##### 3.138.2.3 def servers::serviceClientMap::ServiceClientMapIn::getUser ( *self*)

Get the user .

##### 3.138.2.4 def servers::serviceClientMap::ServiceClientMapIn::getMsg ( *self*)

Get the reply message.

**3.138.2.5** `def servers::serviceClientMap::ServiceClientMapIn::getJobID ( self)`

Get the job ID.

**3.138.2.6** `def servers::serviceClientMap::ServiceClientMapIn::getSessionID ( self)`

Get the session ID.

**3.138.2.7** `def servers::serviceClientMap::ServiceClientMapIn::getGroupID ( self)`

Get the group ID .

**3.138.2.8** `def servers::serviceClientMap::ServiceClientMapIn::getExitCode ( self)`

Get the exit code.

**3.138.2.9** `def servers::serviceClientMap::ServiceClientMapIn::hasExitCode ( self)`

Return True if the reply has exit code.

**3.138.2.10** `def servers::serviceClientMap::ServiceClientMapIn::getStatus ( self)`

Return the status.

**3.138.2.11** `def servers::serviceClientMap::ServiceClientMapIn::getChisq ( self)`

Get the chisq from the reply.

The documentation for this class was generated from the following file:

- servers/serviceClientMap.py

## 3.139 servers::serviceClientMap::ServiceClientMapOut Class Reference

### Public Member Functions

- def `__init__`
- def `parse`

#### 3.139.1 Detailed Description

A class that handle the request sent to the working node.

#### 3.139.2 Member Function Documentation

##### 3.139.2.1 def servers::serviceClientMap::ServiceClientMapOut::\_\_init\_\_ ( *self*)

Constructor.

##### 3.139.2.2 def servers::serviceClientMap::ServiceClientMapOut::parse ( *self*, *data*)

Handle the request.

The documentation for this class was generated from the following file:

- servers/serviceClientMap.py

## 3.140 servers::serviceService::ServiceCommand Class Reference

### Public Member Functions

- def `__init__`
- def `run`

### Public Attributes

- `msg`

### Static Public Attributes

- int `ServiceCommandID = 0L`  
*id for each service command*

#### 3.140.1 Detailed Description

Run a job as a inline command.

#### 3.140.2 Member Function Documentation

##### 3.140.2.1 def servers::serviceService::ServiceCommand::\_\_init\_\_ ( *self*, *task*, *queue*, *commandQ* = None)

Constructor.

##### 3.140.2.2 def servers::serviceService::ServiceCommand::run ( *self*)

Perfrom the work.

#### 3.140.3 Member Data Documentation

##### 3.140.3.1 servers::serviceService::ServiceCommand::msg

reply message `self.msg = xmlescape('Running s as a inline command' %(task.cmd))`

The documentation for this class was generated from the following file:

- `servers/serviceService.py`

## 3.141 servers::serviceService::ServiceIn Class Reference

### Public Member Functions

- def `__init__`
- def `getCmd`
- def `getId`
- def `getPid`
- def `parse`
- def `doCommandWork`
- def `doThreadWork`
- def `doProcessWork`
- def `getTask`
- def `getJobID`
- def `getRunType`
- def `getCommand`

### 3.141.1 Detailed Description

The service in the working nodes.

### 3.141.2 Member Function Documentation

#### 3.141.2.1 def servers::serviceService::ServiceIn::\_\_init\_\_ ( *self*, *queue*)

Constructor.

#### 3.141.2.2 def servers::serviceService::ServiceIn::getCmd ( *self*)

return the command name.

#### 3.141.2.3 def servers::serviceService::ServiceIn::getId ( *self*)

return the id to be killed

#### 3.141.2.4 def servers::serviceService::ServiceIn::getPid ( *self*)

return the id to be killed

#### 3.141.2.5 def servers::serviceService::ServiceIn::parse ( *self*, *xmlStr*)

Parse the task request from a XML string



## 3.142 servers::serviceMap::ServiceMapIn Class Reference

### Public Member Functions

- def `__init__`
- def `parse`
- def `getType`
- def `getUser`
- def `getSession`
- def `getSessionName`
- def `getSessionID`
- def `getGroupIDs`
- def `getJobInfo`

### Public Attributes

- `session`  
*a service request.*

#### 3.142.1 Detailed Description

A class to handle the service request from the client

#### 3.142.2 Member Function Documentation

##### 3.142.2.1 def servers::serviceMap::ServiceMapIn::\_\_init\_\_ ( *self* )

Constructor.

##### 3.142.2.2 def servers::serviceMap::ServiceMapIn::parse ( *self*, *cmd* )

parse a request.

##### 3.142.2.3 def servers::serviceMap::ServiceMapIn::getType ( *self* )

get the request type.

##### 3.142.2.4 def servers::serviceMap::ServiceMapIn::getUser ( *self* )

Return the user of the request.

##### 3.142.2.5 def servers::serviceMap::ServiceMapIn::getSession ( *self* )

Return the request.

**3.142.2.6** `def servers::serviceMap::ServiceMapIn::getSessionName ( self)`

Return the name of the service request.

**3.142.2.7** `def servers::serviceMap::ServiceMapIn::getSessionID ( self)`

Return the id of the service request.

**3.142.2.8** `def servers::serviceMap::ServiceMapIn::getGroupIDs ( self)`

Return the groupids of the service request.

**3.142.2.9** `def servers::serviceMap::ServiceMapIn::getJobInfo ( self)`

Return the job information of the request.

The documentation for this class was generated from the following file:

- servers/serviceMap.py

## 3.143 servers::serviceMap::ServiceMapOut Class Reference

### Public Member Functions

- def `__init__`
- def `parse`

#### 3.143.1 Detailed Description

Service to handle the reply sent back to the client.

#### 3.143.2 Member Function Documentation

##### 3.143.2.1 def servers::serviceMap::ServiceMapOut::\_\_init\_\_ ( *self*)

Constructor.

##### 3.143.2.2 def servers::serviceMap::ServiceMapOut::parse ( *self*, *data*)

Handle the reply.

The documentation for this class was generated from the following file:

- servers/serviceMap.py

## 3.144 servers::serviceService::ServiceOut Class Reference

### Public Member Functions

- def `__init__`
- def `parse`

#### 3.144.1 Detailed Description

The handler for the reply message.

#### 3.144.2 Member Function Documentation

##### 3.144.2.1 def servers::serviceService::ServiceOut::\_\_init\_\_ ( *self*)

Constructor.

##### 3.144.2.2 def servers::serviceService::ServiceOut::parse ( *self*, *xmlStr*)

Process the reply message.

The documentation for this class was generated from the following file:

- servers/serviceService.py

## 3.145 servers::serviceService::ServiceProcess Class Reference

### Public Member Functions

- def `__init__`
- def `run`

### Public Attributes

- `msg`  
*perform the work.*
- `pid`
- `ps`  
*the process object of the running task*

### Static Public Attributes

- `int ServiceProcessID = 0L`  
*id for each service*

#### 3.145.1 Detailed Description

Run a job as a separated process.

#### 3.145.2 Member Function Documentation

##### 3.145.2.1 `def servers::serviceService::ServiceProcess::__init__ ( self, task, queue, processQ = None)`

Constructor.

##### 3.145.2.2 `def servers::serviceService::ServiceProcess::run ( self)`

Perform the work.

#### 3.145.3 Member Data Documentation

##### 3.145.3.1 `servers::serviceService::ServiceProcess::msg`

perform the work.

add searching paths for the process; doesn't work without home if env is None: `env = {}`; `env['PATH'] = os.environ['PATH']` else: if 'PATH' not in `env.keys()`: `env['PAYH'] = os.environ['PATH']`

The documentation for this class was generated from the following file:

- `servers/serviceService.py`

## 3.146 servers::serviceService::ServiceProcess\_old Class Reference

### Public Member Functions

- def `__init__`
- def `run`

### Public Attributes

- `msg`  
*perform the work.*
- `ps`  
*the process object of the running task*

### Static Public Attributes

- int `ServiceProcessID = 0L`  
*id for each service*

#### 3.146.1 Detailed Description

Run a job as a separated process.

#### 3.146.2 Member Function Documentation

##### 3.146.2.1 `def servers::serviceService::ServiceProcess_old::__init__ ( self, task, queue, processQ = None)`

Constructor.

##### 3.146.2.2 `def servers::serviceService::ServiceProcess_old::run ( self)`

Perform the work.

The documentation for this class was generated from the following file:

- `servers/serviceService.py`

## 3.147 servers::serviceServer::ServiceServer Class Reference

### Public Member Functions

- def `__init__`
- def `handle_connect`
- def `handle_accept`
- def `handle_close`
- def `log`
- def `log_info`

### Public Attributes

- `queue`  
*the message queue*
- `commandQ`  
*the job queue for jobs running in command mode.*
- `threadQ`  
*the job queue for jobs running in thread mode.*
- `processQ`  
*the job queue for jobs running in process mode.*

### 3.147.1 Detailed Description

A class to accept the service request.

### 3.147.2 Member Function Documentation

#### 3.147.2.1 def servers::serviceServer::ServiceServer::\_\_init\_\_ ( *self*, *port*, *host*)

Constructor.

#### 3.147.2.2 def servers::serviceServer::ServiceServer::handle\_connect ( *self*)

Handle for the connection

#### 3.147.2.3 def servers::serviceServer::ServiceServer::handle\_accept ( *self*)

Handle the connection request.

#### 3.147.2.4 def servers::serviceServer::ServiceServer::handle\_close ( *self*)

handle the close of the connection.

### 3.147.2.5 def servers::serviceServer::ServiceServer::log ( *self*, *msg*)

Normal logging

### 3.147.2.6 def servers::serviceServer::ServiceServer::log\_info ( *self*, *msg*, *type0* = 'info')

General logging, including the informational, warning and error logging

The documentation for this class was generated from the following file:

- servers/serviceServer.py

## 3.148 servers::serviceService::ServiceThread Class Reference

### Public Member Functions

- def `__init__`
- def `run`

### Public Attributes

- `msg`  
*the reply message*

### Static Public Attributes

- int `ServiceThreadID` = 0L  
*ID for each thread.*

#### 3.148.1 Detailed Description

Run a job as a python function. The job must be python function.

#### 3.148.2 Member Function Documentation

##### 3.148.2.1 def servers::serviceService::ServiceThread::\_\_init\_\_ ( *self*, *task*, *queue*, *threadQ* = None)

Constructor.

##### 3.148.2.2 def servers::serviceService::ServiceThread::run ( *self*)

Perform the work.

The documentation for this class was generated from the following file:

- servers/serviceService.py

## 3.149 parkAui::xmlUtil::serviceXml::ServiceXml Class Reference

### Public Member Functions

- def `__init__`

### Public Attributes

- `nodename`

#### 3.149.1 Detailed Description

The service that can exchanged by XML string.

#### 3.149.2 Member Function Documentation

##### 3.149.2.1 def parkAui::xmlUtil::serviceXml::ServiceXml::\_\_init\_\_ ( *self*, *nodename* = None)

Constructor.

The documentation for this class was generated from the following file:

- `parkAui/xmlUtil/serviceXml.py`

## 3.150 parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous Class Reference

### Public Member Functions

- def `__init__`
- def `getChildNames`
- def `getNamedChildrenCount`
- def `getAnonymousChildrenCount`
- def `getChildrenCount`
- def `getNamedChild`
- def `getAnonymousChild`
- def `getNamedChildren`
- def `getAnonymousChildren`
- def `getChildren`
- def `setChild`
- def `addChild`
- def `removeChild`
- def `removeAnomynous`
- def `getText`
- def `clone`
- def `__eq__`

#### 3.150.1 Detailed Description

The `serviceXml` that has both the attributes and child nodes.

The attributes can be accessed by `obj.attrname` directly, but the child nodes must be added using `AddChild`, and can be accessed by `obj.childnose`.

#### 3.150.2 Member Function Documentation

**3.150.2.1** def `parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::__init__` (*self*, *nodename* = None, *name* = None)

Constructor.

**3.150.2.2** def `parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::getChildNames` (*self*)

Return the children names

**3.150.2.3** def `parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::getNamedChildrenCount` (*self*)

Return the children number

**3.150.2.4** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::getAnonymousChildrenCount  
( *self*)

Return the children number

**3.150.2.5** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::getChildrenCount  
( *self*)

Return the children number

**3.150.2.6** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::getNamedChild  
( *self*, *nameid*)

Return the child by its name or its position

**3.150.2.7** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::getAnonymousChild  
( *self*, *nameid*)

Return the child node by its position.

**3.150.2.8** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::getNamedChildren  
( *self*, *nodetype* = None)

Return the children with the same nodename

**3.150.2.9** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::getAnonymousChildren  
( *self*, *nodetype* = None)

Return the children with the same nodename

**3.150.2.10** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::getChildren  
( *self*, *nodetype* = None)

Return the children with the same nodename

**3.150.2.11** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::setChild  
( *self*, *obj*, *name* = None)

Add a child

**3.150.2.12** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::addChild  
( *self*, *obj*, *name* = None)

Add a child

**3.150.2.13** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::removeChild  
( *self*, *name*)

Remove a child by the name

**3.150.2.14** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::removeAnonymous  
( *self*, *ind* = None)

Remove a child by its position.

**3.150.2.15** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::getText  
( *self*)

Return the text

**3.150.2.16** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::clone  
( *self*)

return a copy of current object.

**3.150.2.17** def  
parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous::\_\_-  
eq\_\_ ( *self*, *other*)

Return True if two objects are equal

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/serviceXmlAnonymous.py

## 3.151 parkAui::xmlUtil::serviceXmlAttr::ServiceXmlAttr Class Reference

### Public Member Functions

- def `__init__`

### Public Attributes

- `name`

#### 3.151.1 Detailed Description

The `serviceXml` that only has the attributes.  
The attributes can be accessed by `obj.attrname` directly.

#### 3.151.2 Member Function Documentation

- ##### 3.151.2.1 `def parkAui::xmlUtil::serviceXmlAttr::ServiceXmlAttr::__init__ ( self, nodename = None, name = None)`

Constructor.

The documentation for this class was generated from the following file:

- `parkAui/xmlUtil/serviceXmlAttr.py`

## 3.152 servers::storageSys::StorageSystem Class Reference

### Public Member Functions

- def `put`
- def `getKeys`

#### 3.152.1 Detailed Description

The base class to store/extract the information by its keys.

#### 3.152.2 Member Function Documentation

##### 3.152.2.1 def servers::storageSys::StorageSystem::put ( *self*, *keys*, *info*)

store the information in the storage system.

##### 3.152.2.2 def servers::storageSys::StorageSystem::getKeys ( *self*, *keys*)

get the information related to the key.

The documentation for this class was generated from the following file:

- servers/storageSys.py

## 3.153 servers::xmlTask::TaskSession Class Reference

### Public Member Functions

- def `__init__`

### Public Attributes

- `jid`  
*job id*
- `gid`  
*group id*
- `sid`  
*session id*
- `pid`  
*process id*

### 3.153.1 Detailed Description

Request session.

### 3.153.2 Member Function Documentation

#### 3.153.2.1 def servers::xmlTask::TaskSession:: `__init__` ( *jid*, *gid*, *sid*, *pid*)

Constructor.

The documentation for this class was generated from the following file:

- servers/xmlTask.py

## 3.154 parkAui::xmlUtil::theory::Theory Class Reference

### 3.154.1 Detailed Description

The base class to implement the theoretical calculation.  
It is an abstract class, defines the generic interface  
to the theory classes.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/theory.py

## 3.155 parkAui::xmlUtil::theory0::Theory Class Reference

### 3.155.1 Detailed Description

The base class to implement the theoretical calculation.  
It is an abstract class, defines the generic interface  
to the theory classes.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/theory0.py

## 3.156 parkAui::xmlUtil::xmlAttribute::XmlAttribute Class Reference

### 3.156.1 Detailed Description

The `serviceXml` that only has the attributes.  
The attributes can be accessed by `obj.attrname` directly.

The documentation for this class was generated from the following file:

- `parkAui/xmlUtil/xmlAttribute.py`

## 3.157 parkAui::xmlUtil::xmlConstrain::XmlConstrain Class Reference

### 3.157.1 Detailed Description

XML request for constrain.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlConstrain.py

## 3.158 parkAui::xmlUtil::xmlConstrain::XmlConstrains Class Reference

The generic interface for the data source.

### 3.158.1 Detailed Description

The generic interface for the data source.

`XML request for constrains.`

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlConstrain.py

## 3.159 parkAui::xmlUtil::xmlData::XmlData Class Reference

### 3.159.1 Detailed Description

The individual data within a dataset, which has the meta data and the instrument data. Instrument data may be part of the meta data. It is assumed that instrument data is related to the experiment instrument. It should be the not-editable data in the fitting services, while the meta data may be changed. Do we need to combined the instrument data, editable meta data, non-editable meta data together as the meta data ??

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlData.py

## 3.160 servers::xmlDatasetSvr::XmlData Class Reference

### Public Member Functions

- def `__init__`

### Public Attributes

- `name`
- `url`
- `local`
- `fetch`

### 3.160.1 Detailed Description

a set of data in dataset.

The documentation for this class was generated from the following file:

- `servers/xmlDatasetSvr.py`

## 3.161 parkAui::xmlUtil::xmlDataArray::XmlDataArray Class Reference

### 3.161.1 Detailed Description

XmlDataArray has the following xml format:  
<array [name] size='array\_size'> [array\_data] </array>

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlDataArray.py

## 3.162 parkAui::xmlUtil::xmlDataMatrix::XmlDataMatrix Class Reference

### 3.162.1 Detailed Description

XmlDataMatrix has the following format:  
<matrix [name='name'] row='row\_size' col='col\_size'>  
 [array\_data] </array>

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlDataMatrix.py

## 3.163 parkAui::xmlUtil::xmlDataNArray::XmlDataNArray Class Reference

### 3.163.1 Detailed Description

XmlDataNArray has the following format:  
<array [name] shape='[shape] '> [array\_data] </array>

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlDataNArray.py

## 3.164 parkAui::xmlUtil::xmlDataObject::XmlDataObject Class Reference

### 3.164.1 Detailed Description

XmlDataArray has the following xml format:  
<array [name] size='array\_size'> [array\_data] </array>

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlDataObject.py

## 3.165 servers::xmlDatasetSvr::XmlDataset Class Reference

### Public Member Functions

- def `__init__`
- def `parseNode`

### Public Attributes

- `data`

#### 3.165.1 Detailed Description

a class to handle the dataset.

The dataset has the following format:

```
<dataset>
  <d name='name' url='url_of_remote_data_file|imbed' local='local_file_name' fetch='yes|no'/>
  <d name='name' url='url_of_remote_data_file|imbed' local='local_file_name' fetch='yes|no'/>
</dataset>
```

#### 3.165.2 Member Function Documentation

##### 3.165.2.1 def servers::xmlDatasetSvr::XmlDataset::\_\_init\_\_ ( *self* )

constructor.

##### 3.165.2.2 def servers::xmlDatasetSvr::XmlDataset::parseNode ( *self*, *xmlnode* )

parse the xml node and fetch the data if necessary.

The documentation for this class was generated from the following file:

- servers/xmlDatasetSvr.py

## 3.166 parkAui::xmlUtil::xmlDataset::XmlDataset Class Reference

### 3.166.1 Detailed Description

A collection of the data.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlDataset.py

## 3.167 parkAui::xmlUtil::xmlFitting::XmlFitting Class Reference

### 3.167.1 Detailed Description

XML request for data fitting.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlFitting.py

## 3.168 parkAui::xmlUtil::xmlFittingJob::XmlFittingJob Class Reference

### 3.168.1 Detailed Description

The Xml job format for Fitting

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlFittingJob.py

## 3.169 servers::xmlJobGroup::XmlGroup Class Reference

### Public Member Functions

- def `__init__`
- def `parseNode`
- def `getJobs`
- def `getReduceJob`
- def `getMapJob`
- def `getDeps`
- def `__repr__`

### Public Attributes

- **parent**  
*the session request that this group is in.*
- **id**  
*jobgroup id*
- **name**  
*name of job group.*
- **priority**  
*priority for the job group.*
- **type**  
*running type of the group.*
- **children**  
*jobs in the group.*
- **res**  
*resource limitation for the job group*
- **reducejob**  
*reduce job.*
- **mapjob**  
*map job.*
- **dataset**

### Static Public Attributes

- **int XmlGroupID = 0L**  
*id for each group request.*

### 3.169.1 Detailed Description

Class to handle the XML string(node) of job group

### 3.169.2 Member Function Documentation

#### 3.169.2.1 `def servers::xmlJobGroup::XmlGroup::__init__ ( self, session)`

Constructor.

#### 3.169.2.2 `def servers::xmlJobGroup::XmlGroup::parseNode ( self, xmlnode)`

parse the jobGroup request

#### 3.169.2.3 `def servers::xmlJobGroup::XmlGroup::getJobs ( self)`

Get the jobs within the group.

#### 3.169.2.4 `def servers::xmlJobGroup::XmlGroup::getReduceJob ( self)`

Return the reduce job

#### 3.169.2.5 `def servers::xmlJobGroup::XmlGroup::getMapJob ( self)`

Return the map job

#### 3.169.2.6 `def servers::xmlJobGroup::XmlGroup::getDeps ( self)`

Return the dependency within the group.

#### 3.169.2.7 `def servers::xmlJobGroup::XmlGroup::__repr__ ( self)`

Return the string representation of the group.

### 3.169.3 Member Data Documentation

#### 3.169.3.1 `servers::xmlJobGroup::XmlGroup::reducejob`

reduce job.

dependence of the job `self.deps = None`

The documentation for this class was generated from the following file:

- `servers/xmlJobGroup.py`

## 3.170 servers::xmlGroup::XmlGroup Class Reference

### Public Member Functions

- def `__init__`
- def `parseNode`
- def `getJobs`
- def `getGroupJob`
- def `getDeps`
- def `__repr__`

### Public Attributes

- **parent**  
*the session request that this group is in.*
- **id**  
*jobgroup id*
- **name**  
*name of job group.*
- **priority**  
*priority for the job group.*
- **type**  
*running type of the group.*
- **children**  
*jobs in the group.*
- **res**  
*resource limitation for the job group*
- **postjob**

### Static Public Attributes

- **int XmlGroupID = 0L**  
*id for each group request.*

#### 3.170.1 Detailed Description

Class to handle the XML string(node) of job group

### 3.170.2 Member Function Documentation

#### 3.170.2.1 `def servers::xmlGroup::XmlGroup::__init__ ( self, session)`

Constructor.

#### 3.170.2.2 `def servers::xmlGroup::XmlGroup::parseNode ( self, xmlnode)`

parse the jobGroup request

#### 3.170.2.3 `def servers::xmlGroup::XmlGroup::getJobs ( self)`

Get the jobs within the group.

#### 3.170.2.4 `def servers::xmlGroup::XmlGroup::getGroupJob ( self)`

Return the group job should will be run before the group finished.

#### 3.170.2.5 `def servers::xmlGroup::XmlGroup::getDeps ( self)`

Return the dependency within the group.

#### 3.170.2.6 `def servers::xmlGroup::XmlGroup::__repr__ ( self)`

Return the string representation of the group.

### 3.170.3 Member Data Documentation

#### 3.170.3.1 `servers::xmlGroup::XmlGroup::postjob`

dependence of the job `self.deps = None` job that will be run when all the jobs in the group finished.

The documentation for this class was generated from the following file:

- `servers/xmlGroup.py`

## 3.171 servers::xmlResource::XmlGroupDependence Class Reference

### Public Member Functions

- def `__init__`
- def `reset`
- def `parseNode`
- def `getDepsID`
- def `getDepsValue`
- def `hasDeps`
- def `__repr__`

### Public Attributes

- `depsid`  
*jobid of the depended jobs*
- `depsvalue`  
*job name of the depended jobs*

#### 3.171.1 Detailed Description

A dependency in the Job group.

#### 3.171.2 Member Function Documentation

##### 3.171.2.1 `def servers::xmlResource::XmlGroupDependence::__init__ ( self)`

Constructor.

##### 3.171.2.2 `def servers::xmlResource::XmlGroupDependence::reset ( self)`

Reset to the default values.

##### 3.171.2.3 `def servers::xmlResource::XmlGroupDependence::parseNode ( self, depsNode)`

Parse a xml GroupDependence node.

##### 3.171.2.4 `def servers::xmlResource::XmlGroupDependence::getDepsID ( self)`

Get the jobids of the depended jobs.

**3.171.2.5** `def servers::xmlResource::XmlGroupDependence::getDepsValue ( self)`

Get the job names of the dependedented jobs.

**3.171.2.6** `def servers::xmlResource::XmlGroupDependence::hasDeps ( self)`

Return true if there is any dependedented jobs.

**3.171.2.7** `def servers::xmlResource::XmlGroupDependence::__repr__ ( self)`

Return a string.

The documentation for this class was generated from the following file:

- servers/xmlResource.py

## 3.172 servers::xmlJobGroupReduce::XmlGroupInfo Class Reference

### Public Member Functions

- def `__init__`
- def `__repr__`

### Public Attributes

- `name`  
*jobgroup id*
- `id`
- `type`
- `priority`
- `sid`
- `user`
- `res`
- `reducejob`  
*reduce and map jobs.*
- `mapjob`

### 3.172.1 Detailed Description

store information about the group.

### 3.172.2 Member Function Documentation

#### 3.172.2.1 `def servers::xmlJobGroupReduce::XmlGroupInfo::__init__ ( self, group)`

Constructor.

#### 3.172.2.2 `def servers::xmlJobGroupReduce::XmlGroupInfo::__repr__ ( self)`

Return the string representation of the group.

The documentation for this class was generated from the following file:

- `servers/xmlJobGroupReduce.py`

## 3.173 servers::xmlJobGroupReduce::XmlGroupReduce Class Reference

### Public Member Functions

- def `__init__`
- def `parseString`
- def `parseNode`
- def `getJobs`
- def `getDeps`
- def `__repr__`

### Public Attributes

- `name`  
*jobgroup id*
- `id`
- `type`
- `priority`
- `sid`
- `user`
- `res`
- `children`  
*jobs in the group.*
- `reducejob`  
*reduce and map jobs.*
- `mapjob`
- `dataset`

#### 3.173.1 Detailed Description

Class to handle the XML string(node) of job group

#### 3.173.2 Member Function Documentation

**3.173.2.1** `def servers::xmlJobGroupReduce::XmlGroupReduce::__init__ ( self, group)`

Constructor.

**3.173.2.2** `def servers::xmlJobGroupReduce::XmlGroupReduce::parseNode ( self, xmlnode)`

parse the jobGroup request

### 3.173.2.3 def servers::xmlJobGroupReduce::XmlGroupReduce::getJobs ( *self*)

Get the jobs within the group.

### 3.173.2.4 def servers::xmlJobGroupReduce::XmlGroupReduce::\_\_repr\_\_ ( *self*)

Return the string representation of the group.

The documentation for this class was generated from the following file:

- servers/xmlJobGroupReduce.py

## 3.174 parkAui::xmlUtil::xmlDataMeta::XmlInstrumentData Class Reference

### 3.174.1 Detailed Description

Instrument data. User controlled data,  
changed during the pre-processing.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlDataMeta.py

## 3.175 servers::xmlJobSvr::XmlJob Class Reference

### Public Member Functions

- def `__init__`
- def `parseNode`
- def `hasDeps`
- def `getDeps`
- def `clone`
- def `toXmlAttr`
- def `addXmlAttr`
- def `toXmlFullString`
- def `toXmlString`
- def `toXmlCompactString`
- def `__repr__`
- def `getTaskXmlString`
- def `processDataSet`

### Public Attributes

- **parent**  
*The job group that the job belongs to.*
- **type**  
*the running type*
- **id**  
*the job id*
- **name**  
*the job name*
- **xmlInfo**  
*the job information. This xml string will be sent to the working node.*
- **deps**  
*job dependency*
- **res**  
*job resource limitation*
- **priority**  
*job priority*
- **status**  
*job status*
- **arriveTime**  
*job arrive time*

- **startTime**  
*job starting time*
- **runTime**  
*job running time*
- **dest**  
*the destination working node of the job*
- **pid**  
*the processid of the running job*
- **cnt**  
*the number of repeat time*

### Static Public Attributes

- **int XmlJobID = 0L**  
*jobID for each job.*

#### 3.175.1 Detailed Description

A class to handle a XML string (node) for a job.

#### 3.175.2 Member Function Documentation

##### 3.175.2.1 def servers::xmlJobSvr::XmlJob::\_\_init\_\_ ( *self*, *group*)

Constructor.

##### 3.175.2.2 def servers::xmlJobSvr::XmlJob::parseNode ( *self*, *jobNode*)

parse the XML node.

##### 3.175.2.3 def servers::xmlJobSvr::XmlJob::hasDeps ( *self*)

Return true if this job depends on the finishing of other jobs.

##### 3.175.2.4 def servers::xmlJobSvr::XmlJob::getDeps ( *self*, *jobs*)

return the ids of the jobs that this job depends on

**3.175.2.5** def servers::xmlJobSvr::XmlJob::clone ( *self*)

Clone a new job.

**3.175.2.6** def servers::xmlJobSvr::XmlJob::toXmlAttr ( *self*)

Generate a XML string with job properties as the XML attributes.

**3.175.2.7** def servers::xmlJobSvr::XmlJob::addXmlAttr ( *self*)

Add a xml attribute.

**3.175.2.8** def servers::xmlJobSvr::XmlJob::toXmlFullString ( *self*)

Return as a XML string to describe all information about the job.

**3.175.2.9** def servers::xmlJobSvr::XmlJob::toXmlString ( *self*)

Return as a XML string to describe the general information about the job.

**3.175.2.10** def servers::xmlJobSvr::XmlJob::toXmlCompactString ( *self*)

Return as a XML string to describe the compact informatou about the job.

**3.175.2.11** def servers::xmlJobSvr::XmlJob::\_\_repr\_\_ ( *self*)

Return the string representation of the job.

**3.175.2.12** def servers::xmlJobSvr::XmlJob::getTaskXmlString ( *self*, *node*, *indent*  
= None)

Return a XML string that will be sent to the working nodes.

**3.175.2.13** def servers::xmlJobSvr::XmlJob::processDataSet ( *self*, *xmlnode*)

Fetch the data from remote machine.

The documentation for this class was generated from the following file:

- servers/xmlJobSvr.py

## 3.176 parkAui::xmlUtil::xmlJob::XmlJob Class Reference

### 3.176.1 Detailed Description

The xml format for a job.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlJob.py

## 3.177 servers::xmlResource::XmlJobDependence Class Reference

### Public Member Functions

- def `__init__`
- def `reset`
- def `parseNode`
- def `getDepsID`
- def `getDepsValue`
- def `hasDeps`
- def `getDeps`
- def `__repr__`

### Public Attributes

- `depsid`  
*jobids of the depended jobs*
- `depsvalue`  
*job names of the depended jobs*

#### 3.177.1 Detailed Description

A class to handle the dependency of a job

#### 3.177.2 Member Function Documentation

##### 3.177.2.1 def servers::xmlResource::XmlJobDependence::\_\_init\_\_ ( *self*)

Constructor.

##### 3.177.2.2 def servers::xmlResource::XmlJobDependence::reset ( *self*)

reset to the default value.

##### 3.177.2.3 def servers::xmlResource::XmlJobDependence::parseNode ( *self*, *depsNode*)

parse a dependency node.

##### 3.177.2.4 def servers::xmlResource::XmlJobDependence::getDepsID ( *self*)

Get the ids of the dependent jobs.

**3.177.2.5** `def servers::xmlResource::XmlJobDependence::getDepsValue ( self)`

Get the names of the dependent jobs.

**3.177.2.6** `def servers::xmlResource::XmlJobDependence::hasDeps ( self)`

Return True if it depends on other jobs.

**3.177.2.7** `def servers::xmlResource::XmlJobDependence::getDeps ( self, jobs)`

Get the jobids of the dependedented jobs.

**3.177.2.8** `def servers::xmlResource::XmlJobDependence::__repr__ ( self)`

return a string.

The documentation for this class was generated from the following file:

- servers/xmlResource.py

## 3.178 servers::xmlJobList::XmlJobList Class Reference

### Public Member Functions

- def `__init__`
- def `parseNode`
- def `hasDeps`
- def `getDeps`
- def `clone`
- def `toXmlAttr`
- def `toXmlAttr0`
- def `addXmlAttr`
- def `addXmlAttr0`
- def `toXmlFullString`
- def `toXmlString`
- def `toXmlCompactString`
- def `__repr__`
- def `getTaskXmlString`

### Public Attributes

- **parent**  
*The job group that the job belongs to.*
- **type**  
*the running type*
- **id**  
*the job id*
- **name**  
*the job name*
- **xmlInfo**  
*xml information.*
- **deps**  
*job dependency*
- **res**  
*job resource limitation*
- **priority**  
*job priority*
- **status**  
*job status*
- **arriveTime**

*job arrive time*

- **startTime**

*job starting time*

- **runTime**

*job running time*

- **dest**

*the destination working node of the job*

- **pid**

*the processid of the running job*

- **cnt**

*the number of repeat time*

## Static Public Attributes

- **int XmlJobListID = 0L**

*jobID for each job.*

### 3.178.1 Detailed Description

A class to handle a XML string (node) for a job list.

### 3.178.2 Member Function Documentation

#### 3.178.2.1 `def servers::xmlJobList::XmlJobList::__init__ ( self, group)`

Constructor.

#### 3.178.2.2 `def servers::xmlJobList::XmlJobList::parseNode ( self, jobNode)`

parse the XML node.

#### 3.178.2.3 `def servers::xmlJobList::XmlJobList::hasDeps ( self)`

Return true if this job depends on the finishing of other jobs.

#### 3.178.2.4 `def servers::xmlJobList::XmlJobList::getDeps ( self, jobs)`

return the ids of the jobs that this job depends on

**3.178.2.5** def servers::xmlJobList::XmlJobList::clone ( *self*)

Clone a new job.

**3.178.2.6** def servers::xmlJobList::XmlJobList::toXmlAttr ( *self*)

Generate a XML string with job properties as the XML attributes.

**3.178.2.7** def servers::xmlJobList::XmlJobList::toXmlAttr0 ( *self*)

Generate a XML string with job properties as the XML attributes.

**3.178.2.8** def servers::xmlJobList::XmlJobList::addXmlAttr ( *self*, *s0*)

Add a xml attribute.

**3.178.2.9** def servers::xmlJobList::XmlJobList::addXmlAttr0 ( *self*, *s0*)

Add a xml attribute.

**3.178.2.10** def servers::xmlJobList::XmlJobList::toXmlFullString ( *self*)

Return as a XML string to describe all information about the job.

**3.178.2.11** def servers::xmlJobList::XmlJobList::toXmlString ( *self*)

Return as a XML string to describe the general information about the job.

**3.178.2.12** def servers::xmlJobList::XmlJobList::toXmlCompactString ( *self*)

Return as a XML string to describe the compact informatou about the job.

**3.178.2.13** def servers::xmlJobList::XmlJobList::\_\_repr\_\_ ( *self*)

Return the string representation of the job.

**3.178.2.14** def servers::xmlJobList::XmlJobList::getTaskXmlString ( *self*, *node*,  
*indent* = None)

Return a XML string that will be sent to the working nodes.

The documentation for this class was generated from the following file:

- servers/xmlJobList.py

## 3.179 parkAui::xmlUtil::xmlJob::XmlJobList Class Reference

### 3.179.1 Detailed Description

the xml format for the job list.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlJob.py

## 3.180 parkAui::xmlUtil::xmlJobReply::XmlJobReply Class Reference

### 3.180.1 Detailed Description

The results form park fitting.

Each reply contains at most one OptReply results.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlJobReply.py

## 3.181 parkAui::xmlUtil::xmlJobReply::XmlJobReplyData Class Reference

### 3.181.1 Detailed Description

The results to be kept for the each group of job

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlJobReply.py

## 3.182 servers::xmlJobSession::XmlJobSession Class Reference

### Public Member Functions

- def `__init__`
- def `reset`
- def `parseString`
- def `getChildren`
- def `getJobs`
- def `getSessionJob`
- def `__repr__`

### Public Attributes

- **id**  
*session ID*
- **type**  
*running type*
- **version**  
*request version*
- **user**  
*user of the request.*
- **priority**  
*priority*
- **name**  
*session name*
- **email**  
*user email*
- **children**  
*the requested job groups*
- **res**  
*the resource requirement*
- **postjob**
- **runtype**  
*job running type. Currently support 3 types:command, thread, process*
- **pattern**  
*running pattern. Current only support map-reduce pattern.*

## Static Public Attributes

- `int XmlJobSessionID = 0L`  
*session ID*

### 3.182.1 Detailed Description

A class to handle XML string(node) for job session.

### 3.182.2 Member Function Documentation

#### 3.182.2.1 `def servers::xmlJobSession::XmlJobSession::__init__ ( self)`

Constructor.

#### 3.182.2.2 `def servers::xmlJobSession::XmlJobSession::reset ( self)`

Reset to default values.

#### 3.182.2.3 `def servers::xmlJobSession::XmlJobSession::parseString ( self, xmlStr)`

parse a xml string.

#### 3.182.2.4 `def servers::xmlJobSession::XmlJobSession::getChildren ( self)`

return the children

#### 3.182.2.5 `def servers::xmlJobSession::XmlJobSession::getJobs ( self)`

Return the jobs in the request.

#### 3.182.2.6 `def servers::xmlJobSession::XmlJobSession::getSessionJob ( self)`

Return the session jobs.

#### 3.182.2.7 `def servers::xmlJobSession::XmlJobSession::__repr__ ( self)`

Return a string

### 3.182.3 Member Data Documentation

#### 3.182.3.1 servers::xmlJobSession::XmlJobSession::postjob

the job dependency self.deps = None the post job for the session

The documentation for this class was generated from the following file:

- servers/xmlJobSession.py

## 3.183 parkAui::xmlUtil::xmlJobStatus::XmlJobStatus Class Reference

### Public Member Functions

- def `__init__`

### Public Attributes

- `winid`
- `fname`

### Static Public Attributes

- int `WINID` = 0

#### 3.183.1 Detailed Description

Job status.

#### 3.183.2 Member Function Documentation

##### 3.183.2.1 def parkAui::xmlUtil::xmlJobStatus::XmlJobStatus::\_\_init\_\_ ( *self*)

Constructor.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlJobStatus.py

## 3.184 parkAui::xmlUtil::xmlDataMeta::XmlMetaData Class Reference

### 3.184.1 Detailed Description

Meta data. Get from the data,not changed for pre-processing.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlDataMeta.py

## 3.185 parkAui::xmlUtil::xmlModel::XmlModel Class Reference

### 3.185.1 Detailed Description

XML request for data fitting.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlModel.py

## 3.186 parkAui::xmlUtil::xmlMultiplexor::XmlMultiplexor Class Reference

### 3.186.1 Detailed Description

XML request for Multiplexor.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlMultiplexor.py

## 3.187 parkAui::xmlUtil::xmlNamedObject::XmlNamedObject Class Reference

### Public Member Functions

- def `__init__`
- def `getChildNames`
- def `getNamedChildrenCount`
- def `getAnonymousChildrenCount`
- def `getChildrenCount`
- def `getNamedChild`
- def `getAnonymousChild`
- def `getNamedChildren`
- def `getAnonymousChildren`
- def `getChildren`
- def `setChild`
- def `addChild`
- def `removeChild`
- def `removeChildren`
- def `removeAnomynous`
- def `getText`
- def `clone`
- def `__eq__`

### Public Attributes

- `name`

#### 3.187.1 Detailed Description

The `serviceXml` that has both the attributes and child nodes.  
The attributes can be accessed by `obj.attrname` directly,  
but the child nodes must be added using `AddChild`, and can be  
accessed by `obj.childnose`.

#### 3.187.2 Member Function Documentation

**3.187.2.1** def  
**parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::getChildNames**  
 (*self*)

Return the children names

**3.187.2.2** def  
**parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::getNamedChildrenCount**  
 (*self*)

Return the children number

**3.187.2.3** def  
parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::getAnonymousChildrenCount  
( *self*)

Return the children number

**3.187.2.4** def  
parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::getChildrenCount  
( *self*)

Return the children number

**3.187.2.5** def  
parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::getNamedChild  
( *self*, *nameid*)

Return the child by its name or its position

**3.187.2.6** def  
parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::getAnonymousChild  
( *self*, *nameid*)

Return the child indicated by its position.

**3.187.2.7** def  
parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::getNamedChildren  
( *self*, *nodetype* = None)

Return the children with the same nodename

**3.187.2.8** def  
parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::getAnonymousChildren  
( *self*, *nodetype* = None)

Return the children with the same nodename

**3.187.2.9** def parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::getChildren  
( *self*, *nodetype* = None)

Return the children with the same nodename

**3.187.2.10** def parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::setChild (  
*self*, *obj*, *name* = None)

Add a child

**3.187.2.11** `def parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::addChild (   
 self, obj, name = None)`

Add a child

**3.187.2.12** `def   
 parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::removeChildren   
 ( self, nodetype = None)`

Remove the children with the same nodename

**3.187.2.13** `def parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::getText (   
 self)`

Return the text

**3.187.2.14** `def parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::clone ( self)`

return a copy of current object.

**3.187.2.15** `def parkAui::xmlUtil::xmlNamedObject::XmlNamedObject::__eq__ (   
 self, other)`

Return True if two objects are equal

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlNamedObject.py

## 3.188 parkAui::xmlUtil::xmlObject::XmlObject Class Reference

### 3.188.1 Detailed Description

The `XmlObject` has both the attributes and child nodes.  
The child nodes are accessed only by the index or the name if it has one.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlObject.py

## 3.189 parkAui::xmlUtil::xmlOptimizer::XmlOptimizer Class Reference

### 3.189.1 Detailed Description

A class to create an optimizer for the optimization.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlOptimizer.py

## 3.190 parkAui::xmlUtil::xmlOptResults::XmlOptResults Class Reference

### 3.190.1 Detailed Description

```
Results from the optimizer.  
## Recommended attribute for XmlOptResults:  
## retcode='return_code', nfun='number of function evaluation'  
## residual = 'residual', msg='error_message_for_return'
```

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlOptResults.py

## 3.191 parkAui::xmlUtil::xmlParameter::XmlParameter Class Reference

### Public Member Functions

- def `__init__`

### Public Attributes

- `name`

#### 3.191.1 Detailed Description

XML request for Multiplexor.

The documentation for this class was generated from the following file:

- `parkAui/xmlUtil/xmlParameter.py`

## 3.192 servers::xmlReduceJob::XmlReduceJob Class Reference

### Public Member Functions

- def `__init__`
- def `parseNode`
- def `clone`
- def `__repr__`

### Public Attributes

- `classname`
- `init`

### 3.192.1 Detailed Description

A class to handle a XML string (node) for a reduce job.

### 3.192.2 Member Function Documentation

#### 3.192.2.1 def servers::xmlReduceJob::XmlReduceJob::\_\_init\_\_ ( *self*)

Constructor.

#### 3.192.2.2 def servers::xmlReduceJob::XmlReduceJob::parseNode ( *self*, *node*)

parse the XML node.

#### 3.192.2.3 def servers::xmlReduceJob::XmlReduceJob::clone ( *self*)

Clone a new reduce job.

#### 3.192.2.4 def servers::xmlReduceJob::XmlReduceJob::\_\_repr\_\_ ( *self*)

Return the string representation of the reduce job.

The documentation for this class was generated from the following file:

- servers/xmlReduceJob.py

## 3.193 parkAui::xmlUtil::xmlDataReduction::XmlReductionData Class Reference

### 3.193.1 Detailed Description

A collection of the data.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlDataReduction.py

## 3.194 servers::xmlResource::XmlResource Class Reference

### Public Member Functions

- def `__init__`
- def `parseNode`
- def `clone`
- def `__repr__`
- def `toXmlString`
- def `toXmlNode`

### Public Attributes

- `ncpu`  
*number of CPUs that will be used.*
- `time`  
*the max. CPU time assigned for the job, unit in seconds*
- `mem`  
*the max. memory size assigned for the job, unit in MB*
- `fs`  
*the max. size of the file that can be used for the job, unit in MB*

### 3.194.1 Detailed Description

A class to handle required resource for the job.

### 3.194.2 Member Function Documentation

#### 3.194.2.1 def servers::xmlResource::XmlResource::\_\_init\_\_ ( self)

Constructor.

#### 3.194.2.2 def servers::xmlResource::XmlResource::parseNode ( self, node)

parse the XML node .

#### 3.194.2.3 def servers::xmlResource::XmlResource::clone ( self)

Create a clone one

#### 3.194.2.4 def servers::xmlResource::XmlResource::\_\_repr\_\_ ( self)

Return a string representation of the object.

**3.194.2.5** `def servers::xmlResource::XmlResource::toXmlString ( self)`

Return a xml string

**3.194.2.6** `def servers::xmlResource::XmlResource::toXmlNode ( self)`

Change to a XML node.

The documentation for this class was generated from the following file:

- servers/xmlResource.py

## 3.195 servers::xmlSession::XmlSession Class Reference

### Public Member Functions

- def `__init__`
- def `reset`
- def `parseString`
- def `getJobs`
- def `getSessionJob`
- def `__repr__`

### Public Attributes

- **id**  
*session ID*
- **type**  
*running type*
- **version**  
*request version*
- **user**  
*user of the request.*
- **priority**  
*priority*
- **name**  
*session name*
- **email**  
*user email*
- **children**  
*the requested job groups*
- **res**  
*the resource requirement*
- **postjob**
- **runtype**  
*job running type. Currently support 3 types:command, thread, process*
- **pattern**  
*running pattern. Current only support map-reduce pattern.*

## Static Public Attributes

- `int XmlSessionID = 0L`  
*session ID*

### 3.195.1 Detailed Description

A class to handle XML string(node) for job session.

### 3.195.2 Member Function Documentation

#### 3.195.2.1 `def servers::xmlSession::XmlSession::__init__ ( self)`

Constructor.

#### 3.195.2.2 `def servers::xmlSession::XmlSession::reset ( self)`

Reset to default values.

#### 3.195.2.3 `def servers::xmlSession::XmlSession::parseString ( self, xmlStr)`

parse a xml string.

#### 3.195.2.4 `def servers::xmlSession::XmlSession::getJobs ( self)`

Return the jobs in the request.

#### 3.195.2.5 `def servers::xmlSession::XmlSession::getSessionJob ( self)`

Return the session jobs.

#### 3.195.2.6 `def servers::xmlSession::XmlSession::__repr__ ( self)`

Return a string

### 3.195.3 Member Data Documentation

#### 3.195.3.1 `servers::xmlSession::XmlSession::postjob`

the job dependency self.deps = None the post job for the session

The documentation for this class was generated from the following file:

- `servers/xmlSession.py`

## 3.196 servers::xmlGroupSession::XmlSession Class Reference

### Public Member Functions

- def `__init__`
- def `reset`
- def `parseString`
- def `getJobs`
- def `getSessionJob`
- def `__repr__`

### Public Attributes

- **id**  
*session ID*
- **type**  
*running type*
- **version**  
*request version*
- **user**  
*user of the request.*
- **priority**  
*priority*
- **name**  
*session name*
- **email**  
*user email*
- **children**  
*the requested job groups*
- **res**  
*the resource requirement*
- **postjob**
- **runtype**  
*job running type. Currently support 3 types:command, thread, process*
- **pattern**  
*running pattern. Current only support map-reduce pattern.*

## Static Public Attributes

- `int XmlSessionID = 0L`  
*session ID*

### 3.196.1 Detailed Description

A class to handle XML string(node) for job session.

### 3.196.2 Member Function Documentation

#### 3.196.2.1 `def servers::xmlGroupSession::XmlSession::__init__ ( self)`

Constructor.

#### 3.196.2.2 `def servers::xmlGroupSession::XmlSession::reset ( self)`

Reset to default values.

#### 3.196.2.3 `def servers::xmlGroupSession::XmlSession::parseString ( self, xmlStr)`

parse a xml string.

#### 3.196.2.4 `def servers::xmlGroupSession::XmlSession::getJobs ( self)`

Return the jobs in the request.

#### 3.196.2.5 `def servers::xmlGroupSession::XmlSession::getSessionJob ( self)`

Return the session jobs.

#### 3.196.2.6 `def servers::xmlGroupSession::XmlSession::__repr__ ( self)`

Return a string

### 3.196.3 Member Data Documentation

#### 3.196.3.1 `servers::xmlGroupSession::XmlSession::postjob`

the job dependency self.deps = None the post job for the session

The documentation for this class was generated from the following file:

- `servers/xmlGroupSession.py`

## 3.197 servers::xmlTask::XmlTask Class Reference

### Public Member Functions

- def `__init__`
- def `parse`
- def `parseString`
- def `getTaskSession`
- def `getCommand`
- def `getEnv`
- def `__repr__`
- def `saveInfo`
- def `getCmd`
- def `getArgs`
- def `getFullArgs`
- def `getEnv`
- def `getPostFuncArgs`
- def `getPreFuncArgs`

### Public Attributes

- `type`  
*running type*
- `id`  
*job id*
- `gid`  
*groud id*
- `sid`  
*session id*
- `priority`  
*priority*
- `pid`  
*process id*
- `code`  
*exit code*
- `cmd`  
*command name*
- `home`  
*home directory for the command*
- `arg`

*command arguments*

- **env**  
*command environment*
- **shell**  
*running shell*
- **cwd**  
*current working directory*
- **bufsize**  
*buffer size*
- **stdin**  
*stdin file name*
- **stdout**  
*stdout file name*
- **stderr**  
*std err file name*
- **prefunc**  
*pre-performed function name*
- **prefuncArgs**  
*arguments for pre-performed function*
- **postfunc**  
*post-performed function name*
- **postfuncArgs**  
*arguments for post-performed function*
- **input**  
*user input*

### 3.197.1 Detailed Description

Task that sent from the service server to the working server.

### 3.197.2 Member Function Documentation

#### 3.197.2.1 `def servers::xmlTask::XmlTask::__init__ ( self)`

Constructor.

**3.197.2.2** def servers::xmlTask::XmlTask::parse ( *self*, *fname*)

Parse a file

**3.197.2.3** def servers::xmlTask::XmlTask::parseString ( *self*, *cmdStr*)

parse a xml string.

**3.197.2.4** def servers::xmlTask::XmlTask::getTaskSession ( *self*)

Return a task session

**3.197.2.5** def servers::xmlTask::XmlTask::getCommand ( *self*)

Get command name

**3.197.2.6** def servers::xmlTask::XmlTask::getEnv ( *self*)

Return environment

**3.197.2.7** def servers::xmlTask::XmlTask::\_\_repr\_\_ ( *self*)

Return a string.

**3.197.2.8** def servers::xmlTask::XmlTask::saveInfo ( *self*, *fname*)

save the information.

**3.197.2.9** def servers::xmlTask::XmlTask::getCmd ( *self*)

Get the command name.

**3.197.2.10** def servers::xmlTask::XmlTask::getArgs ( *self*)

Return the arguments.

**3.197.2.11** def servers::xmlTask::XmlTask::getFullArgs ( *self*)

Return all the arguments, including the command.

**3.197.2.12** `def servers::xmlTask::XmlTask::getEnv ( self)`

Get the environment.

**3.197.2.13** `def servers::xmlTask::XmlTask::getPostFuncArgs ( self)`

Get arguments for pre-performed function.

**3.197.2.14** `def servers::xmlTask::XmlTask::getPreFuncArgs ( self)`

get the arguments for post-performed function.

The documentation for this class was generated from the following file:

- servers/xmlTask.py

## 3.198 parkAui::xmlUtil::xmlDataTheory::XmlTheoryData Class Reference

### 3.198.1 Detailed Description

A collection of the data object.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlDataTheory.py

## 3.199 parkAui::xmlUtil::xmlVariable::XmlVariable Class Reference

### 3.199.1 Detailed Description

individual variable definition.

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlVariable.py

## 3.200 parkAui::xmlUtil::xmlVariable::XmlVariables Class Reference

The classes in this model deal with the model part in fitting request.

### 3.200.1 Detailed Description

The classes in this model deal with the model part in fitting request.

`variable definitions.`

The documentation for this class was generated from the following file:

- parkAui/xmlUtil/xmlVariable.py

# Index

- \_\_del\_\_
  - servers::cluster::ClusterController, 21
  - servers::mapServer::MapServer, 100
- \_\_eq\_\_
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 196
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 246
- \_\_gt\_\_
  - servers::queueSys::Job, 87
- \_\_init\_\_
  - parkAui::common::fittingConstrain1::ConstrainParameter, 25
  - parkAui::common::fittingConstrain3::ConstrainParameter, 27
  - parkAui::common::fittingConstrain::ConstrainParameter, 24
  - parkAui::common::fittingDatasetEditor::FittingDatasetEditor, 51
  - parkAui::common::fittingParameter::FittingParameterPair, 59
  - parkAui::common::fittingViewer::FittingViewer, 63
  - parkAui::common::networkThreadNew::NetworkEvent, 129
  - parkAui::common::replyEvent::ParkReplyEvent, 146
  - parkAui::plot::matplotPanel::MatPlotAttribute, 105
  - parkAui::plot::matplotPanelE3::MatPlotFrameE3, 107
  - parkAui::plot::matplotPanelE4::MatPlotFrameE4, 109
  - parkAui::plot::matplotPanelF::MatPlotFrameF, 111
  - parkAui::plot::matplotPanelF::MatPlotPanelF, 119
  - parkAui::plot::matplotPanelP::MatPlotFrameE3, 108
  - parkAui::plot::matplotPanelP::MatPlotFrameE4, 110
  - parkAui::plot::matplotPanelP::MatPlotFrameF, 112
  - parkAui::plot::matplotPanelP::MatPlotFrameP, 113
  - parkAui::plot::matplotPanelP::MatPlotPanelF, 120
  - parkAui::plot::plotPanel::GeneralPlotProperty, 83
  - parkAui::plot::plotPanel::PlotAttribute, 149
  - parkAui::plot::plotPanelE3::PlotFrameE3, 152
  - parkAui::plot::plotPanelEF::PlotFrameEF, 154
  - parkAui::plot::plotPanelF::PlotFrameF, 155
  - parkAui::plot::plotPanelP::PlotFrameP, 156
  - parkAui::plot::plotPanelP::PlotPanelP, 164
  - parkAui::plot::plotPanelR2::PlotFrameR2, 158
  - parkAui::plot::plotPanelR::PlotFrameR, 167
  - parkAui::plot::polyErrorbar::PlotFrame, 151
  - parkAui::xmlUtil::serviceXml::ServiceXml, 193
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 194
  - parkAui::xmlUtil::serviceXmlAttr::ServiceXmlAttr, 197
  - parkAui::xmlUtil::xmlJobStatus::XmlJobStatus, 240
- servers::cluster::Cluster, 18
- servers::cluster::ClusterController, 20
- servers::cluster::ClusterNode, 22
- servers::cluster::ClusterService, 23
- servers::job::Job, 85
- servers::jobQueue::JobQueueException, 92
- servers::mapClient::MapClient, 96
- servers::mapServer::MapServer, 99
- servers::mapService::MapService, 102
- servers::msgQueue::MsgQueue, 123
- servers::msgQueue::MsgQueueSys, 125
- servers::queueAbstract::AbstractQueue, 13
- servers::queueFifo::FifoQueue, 34

- servers::queueNormal::NormalQueue, 132
- servers::queuePriority::PriorityQueue, 168
- servers::queueSys::Job, 87
- servers::queueSys::QueueSys, 171
- servers::replySession::ReplySession, 173
- servers::service::Service, 175
- servers::serviceClientMap::ServiceClientMapIn, 177
- servers::serviceClientMap::ServiceClientMapOut, 179
- servers::serviceMap::ServiceMapIn, 183
- servers::serviceMap::ServiceMapOut, 185
- servers::serviceServer::ServiceServer, 190
- servers::serviceService::ServiceCommand, 180
- servers::serviceService::ServiceIn, 181
- servers::serviceService::ServiceOut, 186
- servers::serviceService::ServiceProcess, 187
- servers::serviceService::ServiceProcess\_old, 189
- servers::serviceService::ServiceThread, 192
- servers::xmlDatasetSvr::XmlDataset, 211
- servers::xmlGroup::XmlGroup, 218
- servers::xmlGroupSession::XmlSession, 258
- servers::xmlJobGroup::XmlGroup, 216
- servers::xmlJobGroupReduce::XmlGroupInfo, 221
- servers::xmlJobGroupReduce::XmlGroupReduce, 222
- servers::xmlJobList::XmlJobList, 232
- servers::xmlJobSession::XmlJobSession, 238
- servers::xmlJobSvr::XmlJob, 226
- servers::xmlReduceJob::XmlReduceJob, 251
- servers::xmlResource::XmlGroupDependence, 219
- servers::xmlResource::XmlJobDependence, 229
- servers::xmlResource::XmlResource, 253
- servers::xmlSession::XmlSession, 256
- servers::xmlTask::TaskSession, 199
- servers::xmlTask::XmlTask, 260
- \_\_repr\_\_
  - servers::cluster::Cluster, 19
  - servers::cluster::ClusterController, 21
- servers::job::Job, 85
- servers::queueSys::Job, 87
- servers::replySession::ReplySession, 174
- servers::xmlGroup::XmlGroup, 218
- servers::xmlGroupSession::XmlSession, 258
- servers::xmlJobGroup::XmlGroup, 216
- servers::xmlJobGroupReduce::XmlGroupInfo, 221
- servers::xmlJobGroupReduce::XmlGroupReduce, 223
- servers::xmlJobList::XmlJobList, 233
- servers::xmlJobSession::XmlJobSession, 238
- servers::xmlJobSvr::XmlJob, 227
- servers::xmlReduceJob::XmlReduceJob, 251
- servers::xmlResource::XmlGroupDependence, 220
- servers::xmlResource::XmlJobDependence, 230
- servers::xmlResource::XmlResource, 253
- servers::xmlSession::XmlSession, 256
- servers::xmlTask::XmlTask, 261
- \_\_str\_\_
  - servers::jobQueue::JobQueueException, 92
- activate
  - servers::queueSys::QueueSys, 171
- addChild
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 195
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 245
- addXmlAttr
  - servers::xmlJobList::XmlJobList, 233
  - servers::xmlJobSvr::XmlJob, 227
- addXmlAttr0
  - servers::xmlJobList::XmlJobList, 233
- change
  - servers::queueAbstract::AbstractQueue, 14
  - servers::queueNormal::NormalQueue, 132
  - servers::queuePriority::PriorityQueue, 168
- clean
  - servers::msgQueue::MsgQueueSys, 125
- clone
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 196

- parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 246
- servers::xmlJobList::XmlJobList, 232
- servers::xmlJobSvr::XmlJob, 226
- servers::xmlReduceJob::XmlReduceJob, 251
- servers::xmlResource::XmlResource, 253
- collect\_incoming\_data
  - servers::mapClient::MapClient, 96
  - servers::mapService::MapService, 102
  - servers::service::Service, 175
- config
  - servers::cluster::Cluster, 18
- delOutputQ
  - servers::queueSys::QueueSys, 172
- doCommandWork
  - servers::serviceService::ServiceIn, 181
- doProcessWork
  - servers::serviceService::ServiceIn, 182
- doThreadWork
  - servers::serviceService::ServiceIn, 182
- empty
  - servers::msgQueue::MsgQueue, 123
  - servers::queueFifo::FifoQueue, 34
  - servers::queueSys::QueueSys, 172
- found\_terminator
  - servers::mapClient::MapClient, 96
  - servers::mapService::MapService, 102
  - servers::service::Service, 175
- full
  - servers::queueFifo::FifoQueue, 34
- get
  - servers::archiveSys::ArchiveSystem, 15
  - servers::queueFifo::FifoQueue, 35
  - servers::queueSys::QueueSys, 171
- getAnonymousChild
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 195
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 245
- getAnonymousChildren
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 195
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 245
- getAnonymousChildrenCount
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 194
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 244
- getArgs
  - servers::xmlTask::XmlTask, 261
- getChildNames
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 194
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 244
- getChildren
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 195
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 245
  - servers::xmlJobSession::XmlJobSession, 238
- getChildrenCount
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 195
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 245
- getChisq
  - servers::serviceClientMap::ServiceClientMapIn, 178
- getCluster
  - servers::cluster::ClusterController, 20
- getCmd
  - servers::serviceService::ServiceIn, 181
  - servers::xmlTask::XmlTask, 261
- getCommand
  - servers::serviceService::ServiceIn, 182
  - servers::xmlTask::XmlTask, 261
- getDataArray
  - parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlData, 76
  - parkAui::builder::gauss::gaussXmlDataSource::GaussXmlData, 75
- getDeps
  - servers::xmlGroup::XmlGroup, 218
  - servers::xmlJobGroup::XmlJobGroup, 216
  - servers::xmlJobList::XmlJobList, 232
  - servers::xmlJobSvr::XmlJob, 226
  - servers::xmlResource::XmlJobDependence, 230
  - servers::xmlResource::XmlGroupDependence, 219
  - servers::xmlResource::XmlJobDependence, 229
  - servers::xmlResource::XmlGroupDependence, 219
  - servers::xmlResource::XmlJobDependence, 229
- getDepsID
  - servers::xmlResource::XmlJobDependence, 229
- getDepsValue
  - servers::xmlResource::XmlGroupDependence, 219
  - servers::xmlResource::XmlJobDependence, 229
- getExt
  - servers::xmlTask::XmlTask, 261

- getErrorMsg
  - servers::mapClient::MapClient, 97
  - servers::mapService::MapService, 103
  - servers::service::Service, 176
- getExitCode
  - servers::serviceClientMap::ServiceClientMapIn, 178
- getFullArgs
  - servers::xmlTask::XmlTask, 261
- getFullNames
  - servers::cluster::Cluster, 18
- getGroupID
  - servers::serviceClientMap::ServiceClientMapIn, 178
- getGroupIDs
  - servers::serviceMap::ServiceMapIn, 184
- getGroupJob
  - servers::xmlGroup::XmlGroup, 218
- getId
  - servers::serviceService::ServiceIn, 181
- getid
  - servers::queueFifo::FifoQueue, 35
- getInstrumentData
  - parkAui::builder::gauss::gaussXmlDataSource::GaussXmlData, 75
- getIPs
  - servers::cluster::Cluster, 18
- getJobID
  - servers::serviceClientMap::ServiceClientMapIn, 177
  - servers::serviceService::ServiceIn, 182
- getJobInfo
  - servers::serviceMap::ServiceMapIn, 184
- getJobs
  - servers::xmlGroup::XmlGroup, 218
  - servers::xmlGroupSession::XmlSession, 258
  - servers::xmlJobGroup::XmlGroup, 216
  - servers::xmlJobGroupReduce::XmlGroupReduce, 222
  - servers::xmlJobSession::XmlJobSession, 238
  - servers::xmlSession::XmlSession, 256
- getKeys
  - servers::msgQueue::MsgQueueSys, 126
  - servers::storageSys::StorageSystem, 198
- getMapJob
  - servers::xmlJobGroup::XmlGroup, 216
- getMsg
  - servers::serviceClientMap::ServiceClientMapIn, 177
- getMsgQueue
  - servers::mapServer::MapServer, 99
- getNamedChild
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 195
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 245
- getNamedChildren
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 195
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 245
- getNamedChildrenCount
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 194
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 244
- getNames
  - servers::cluster::Cluster, 18
- getNode
  - servers::cluster::ClusterController, 21
- getOriginalDataArray
  - parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlData, 76
  - parkAui::builder::gauss::gaussXmlDataSource::GaussXmlData, 75
- getOwnerManager
  - servers::queueSys::QueueSys, 172
- GetOwnerManager
  - parkAui::common::fittingDatasetEditor::FittingDatasetEditor, 51
- getPid
  - servers::serviceService::ServiceIn, 181
- getPostFuncArgs
  - servers::xmlTask::XmlTask, 262
- getPreFuncArgs
  - servers::xmlTask::XmlTask, 262
- getReduceJob
  - servers::xmlJobGroup::XmlGroup, 216
- getReduceSys
  - servers::mapServer::MapServer, 99
- GetRepeatUnit
  - parkAui::plot::plotPanelE3::PlotPanelE3, 160
  - parkAui::plot::plotPanelE4::PlotPanelE4, 161
  - parkAui::plot::plotPanelEF::PlotPanelEF, 162
  - parkAui::plot::plotPanelF::PlotPanelF, 163
  - parkAui::plot::plotPanelP::PlotPanelP, 164
  - parkAui::plot::plotPanelR::PlotPanelR, 165
- GetReply
  - parkAui::common::replyEvent::ParkReplyEvent, 146

- getRunQ
  - servers::queueSys::QueueSys, 171
- getRunType
  - servers::serviceService::ServiceIn, 182
- getService
  - servers::cluster::ClusterController, 21
- getSession
  - servers::serviceMap::ServiceMapIn, 183
- getSessionID
  - servers::serviceClientMap::ServiceClientMapIn, 178
  - servers::serviceMap::ServiceMapIn, 184
- getSessionJob
  - servers::xmlGroupSession::XmlSession, 258
  - servers::xmlJobSession::XmlJobSession, 238
  - servers::xmlSession::XmlSession, 256
- getSessionName
  - servers::serviceMap::ServiceMapIn, 183
- getStatus
  - servers::serviceClientMap::ServiceClientMapIn, 178
- getSysQueue
  - servers::mapServer::MapServer, 99
- getTask
  - servers::serviceService::ServiceIn, 182
- getTaskSession
  - servers::xmlTask::XmlTask, 261
- getTaskXmlString
  - servers::job::Job, 85
  - servers::xmlJobList::XmlJobList, 233
  - servers::xmlJobSvr::XmlJob, 227
- getText
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 196
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 246
- getToken
  - servers::mapServer::MapServer, 99
- getType
  - servers::serviceMap::ServiceMapIn, 183
- getUser
  - servers::serviceClientMap::ServiceClientMapIn, 177
  - servers::serviceMap::ServiceMapIn, 183
- handle\_accept
  - servers::mapServer::MapServer, 99
  - servers::serviceServer::ServiceServer, 190
- handle\_close
  - servers::mapClient::MapClient, 96
  - servers::mapServer::MapServer, 99
- servers::mapService::MapService, 102
- servers::service::Service, 176
- servers::serviceServer::ServiceServer, 190
- handle\_connect
  - servers::mapClient::MapClient, 96
  - servers::mapServer::MapServer, 99
  - servers::mapService::MapService, 102
  - servers::serviceServer::ServiceServer, 190
- handle\_error
  - servers::mapClient::MapClient, 96
  - servers::mapService::MapService, 103
  - servers::service::Service, 176
- handle\_expt
  - servers::mapClient::MapClient, 96
  - servers::mapService::MapService, 103
  - servers::service::Service, 176
- handle\_read
  - servers::mapClient::MapClient, 96
  - servers::mapService::MapService, 102
  - servers::service::Service, 175
- handle\_write
  - servers::mapClient::MapClient, 96
  - servers::mapService::MapService, 102
  - servers::service::Service, 176
- hasDeps
  - servers::xmlJobList::XmlJobList, 232
  - servers::xmlJobSvr::XmlJob, 226
  - servers::xmlResource::XmlGroupDependence, 220
  - servers::xmlResource::XmlJobDependence, 230
- hasExitCode
  - servers::serviceClientMap::ServiceClientMapIn, 178
- hasJobs
  - servers::queueSys::QueueSys, 171
- hasMsg
  - servers::mapService::MapService, 102
  - servers::msgQueue::MsgQueue, 123
  - servers::msgQueue::MsgQueueSys, 125
- hasMsgs
  - servers::msgQueue::MsgQueueSys, 125
- init\_plot\_data
  - parkAui::plot::matplotPanelP::MatPlotFrameE3, 108
  - parkAui::plot::matplotPanelP::MatPlotFrameE4, 110
  - parkAui::plot::matplotPanelP::MatPlotFrameF, 112
  - parkAui::plot::matplotPanelP::MatPlotFrameP, 113

- parkAui::plot::plotPanelE3::PlotFrameE3, 152
- parkAui::plot::plotPanelEF::PlotFrameEF, 154
- parkAui::plot::plotPanelF::PlotFrameF, 155
- parkAui::plot::plotPanelP::PlotFrameP, 156
- parkAui::plot::plotPanelR2::PlotFrameR2, 158
- parkAui::plot::plotPanelR::PlotFrameR, 157
- init\_plot\_data0
  - parkAui::plot::plotPanelP::PlotFrameP, 156
- IsFinishedReply
  - parkAui::common::replyEvent::ParkReplyEvent, 147
- IsResultsReply
  - parkAui::common::replyEvent::ParkReplyEvent, 147
- IsRunningReply
  - parkAui::common::replyEvent::ParkReplyEvent, 147
- isRunQempty
  - servers::queueSys::QueueSys, 171
- IsStartReply
  - parkAui::common::replyEvent::ParkReplyEvent, 147
- IsSubmitReply
  - parkAui::common::replyEvent::ParkReplyEvent, 146
- IsYErrorbar
  - parkAui::plot::plotPanelE3::PlotPanelE3, 160
- killJob
  - servers::mapClient::MapClient, 97
  - servers::mapService::MapService, 103
- lineAttributes
  - parkAui::plot::plotPanel::PlotAttribute, 149
- log
  - servers::mapServer::MapServer, 100
  - servers::serviceServer::ServiceServer, 190
- log\_info
  - servers::mapServer::MapServer, 100
  - servers::serviceServer::ServiceServer, 191
- msg
  - servers::serviceService::ServiceCommand, 180
- servers::serviceService::ServiceProcess, 187
- OnDatasetUpdated
  - parkAui::common::modelPage::ModelPage, 122
- OnModelUpdated
  - parkAui::common::modelPage::ModelPage, 122
- open
  - servers::archiveSys::ArchiveSystem, 15
- parkAui::builder::gauss::gaussData::GaussData, 65
- parkAui::builder::gauss::gaussData::GaussInstrumentData, 72
- parkAui::builder::gauss::gaussDataset::GaussDataset, 66
- parkAui::builder::gauss::gaussDataset::GaussDataSource, 71
- parkAui::builder::gauss::gaussDatasetDataPanel::GaussDatasetData, 67
- parkAui::builder::gauss::gaussDatasetDataPanelP::GaussDatasetData, 68
- parkAui::builder::gauss::gaussDatasetViewer::GaussDatasetViewer, 70
- parkAui::builder::gauss::gaussTheory::GaussParameter, 73
- parkAui::builder::gauss::gaussTheory::GaussTheory, 74
- parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlData, 76
  - getDataArray, 76
  - getOriginalDataArray, 76
- parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlDataset, 78
- parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlDataSource, 80
- parkAui::builder::gauss::gaussXmlDataSource0::GaussXmlInstData, 81
- parkAui::builder::gauss::gaussXmlDataSource::GaussXmlData, 75
  - getDataArray, 75
  - getInstrumentData, 75
  - getOriginalDataArray, 75
- parkAui::builder::gauss::gaussXmlDataSource::GaussXmlDataset, 77
- parkAui::builder::gauss::gaussXmlDataSource::GaussXmlDataSource, 79
- parkAui::builder::gauss::gaussXmlDataSource::GaussXmlInstData, 82
- parkAui::builder::gauss::gDatasetPanel::GaussDatasetPanel, 69

parkAui::common::datasetEvent::ParkDatasetEvent, 137  
 parkAui::common::fittingBuilder0::FittingBuilder, 36  
 parkAui::common::fittingBuilder::FittingBuilder, 39  
 parkAui::common::fittingConstrain0::FittingConstrain, 41  
 parkAui::common::fittingConstrain0::FittingConstrainGrid, 46  
 parkAui::common::fittingConstrain1::ConstrainParameter, 25  
 parkAui::common::fittingConstrain1::ConstrainTable, 30  
 parkAui::common::fittingConstrain1::FittingConstrain, 42  
 parkAui::common::fittingConstrain1::FittingConstrainGrid, 47  
 parkAui::common::fittingConstrain2::ConstrainTable, 31  
 parkAui::common::fittingConstrain2::FittingConstrain, 43  
 parkAui::common::fittingConstrain2::FittingConstrainGrid, 48  
 parkAui::common::fittingConstrain3::ConstrainParameter, 27  
 parkAui::common::fittingConstrain3::ConstrainTable, 32  
 parkAui::common::fittingConstrain3::FittingConstrain, 44  
 parkAui::common::fittingConstrain3::FittingConstrainGrid, 49  
 parkAui::common::fittingConstrain::ConstrainParameter, 24  
 parkAui::common::fittingConstrain::ConstrainTable, 29  
 parkAui::common::fittingConstrain::FittingConstrain, 40  
 parkAui::common::fittingConstrain::FittingConstrainGrid, 45  
 parkAui::common::fittingConstrainTable::ConstrainTable, 33  
 parkAui::common::fittingDatasetDataPanel::FittingDatasetDataPanel, 50  
 parkAui::common::fittingDatasetEditor::FittingDatasetEditor, 51  
 parkAui::common::fittingDatasetMetaPanel::FittingDatasetMetaPanel, 52  
 parkAui::common::fittingDatasetPanel0::FittingDatasetPanel0, 54  
 parkAui::common::fittingDatasetPanel1::FittingDatasetPanel1, 55  
 parkAui::common::fittingDatasetPanel::FittingDatasetPanel, 53  
 parkAui::common::fittingOverview0::FittingOverview, 57  
 parkAui::common::fittingOverview::FittingOverview, 56  
 parkAui::common::fittingPanel::FittingPanel, 58  
 parkAui::common::fittingParameter::FittingParameterPanel, 59  
 parkAui::common::fittingParameter::FittingParameterTable, 60  
 parkAui::common::fittingResidualID::FittingResidualID, 62  
 parkAui::common::fittingResidual::FittingResidual, 61  
 parkAui::common::fittingViewerID::FittingViewerID, 64  
 parkAui::common::fittingViewer::FittingViewer, 63  
 parkAui::common::jobEvent::ParkJobEvent, 139  
 parkAui::common::jobOverviewPanel0::JobOverviewPanel, 90  
 parkAui::common::jobOverviewPanel::JobOverviewPanel, 89  
 parkAui::common::jobPanel::JobPanel, 91  
 parkAui::common::jobTreeListPanel::JobTreeListPanel, 93  
 parkAui::common::modelEvent::ParkModelEvent, 140  
 parkAui::common::modelEvent::ParkParameterEvent, 142  
 parkAui::common::modelPage::ModelPage, 122  
 parkAui::common::modelPage::OnDatasetUpdated, 122  
 parkAui::common::modelPage::OnModelUpdated, 122  
 parkAui::common::networkThreadNew::NetworkClient, 128  
 parkAui::common::networkThreadNew::NetworkEvent, 129  
 parkAui::common::networkThreadNew::NetworkThread, 131  
 parkAui::common::overviewFitting::FittingBuilder, 37  
 parkAui::common::overviewModelDataset::FittingBuilder, 38

- parkAui::common::parkOptimizerPanel::ParkOptimizerPanel, 110
  - \_\_init \_\_\_, 141
- parkAui::common::parkPatternPanel::ParkPatternPanel, 143
  - \_\_init \_\_\_, 143
- parkAui::common::replyEvent::ParkReplyEvent, 146
  - \_\_init \_\_\_, 146
  - GetReply, 146
  - IsFinishedReply, 147
  - IsResultsReply, 147
  - IsRunningReply, 147
  - IsStartReply, 147
  - IsSubmitReply, 146
  - SetFinishedReply, 147
  - SetReply, 146
  - SetResultsReply, 147
  - SetRunningReply, 147
  - SetStartReply, 147
  - SetSubmitReply, 147
- parkAui::parkApp::ParkApp, 136
- parkAui::parkFrame::ParkApp, 135
- parkAui::parkFrame::ParkFrame, 138
- parkAui::plot::auiContainer::AuiContainer, 16
- parkAui::plot::auiPanel::AuiPanel, 17
- parkAui::plot::matplotPanel::MatPlotAttribute, 105
  - \_\_init \_\_\_, 105
  - title, 106
- parkAui::plot::matplotPanel::MatPlotPanel, 114
- parkAui::plot::matplotPanelE3::MatPlotFrameE3, 107
  - \_\_init \_\_\_, 107
- parkAui::plot::matplotPanelE3::MatPlotPanelE3, 115
- parkAui::plot::matplotPanelE4::MatPlotFrameE4, 109
  - \_\_init \_\_\_, 109
- parkAui::plot::matplotPanelE4::MatPlotPanelE4, 117
- parkAui::plot::matplotPanelF::MatPlotFrameF, 111
  - \_\_init \_\_\_, 111
- parkAui::plot::matplotPanelF::MatPlotPanelF, 119
  - \_\_init \_\_\_, 119
- parkAui::plot::matplotPanelP::MatPlotFrameE3, 108
  - \_\_init \_\_\_, 108
  - init\_plot\_data, 108
- parkAui::plot::matplotPanelP::MatPlotFrameE4, 110
  - \_\_init \_\_\_, 110
- parkAui::plot::matplotPanelP::MatPlotFrameF, 112
  - \_\_init \_\_\_, 112
  - init\_plot\_data, 112
- parkAui::plot::matplotPanelP::MatPlotFrameP, 113
  - \_\_init \_\_\_, 113
  - init\_plot\_data, 113
- parkAui::plot::matplotPanelP::MatPlotPanelE3, 116
- parkAui::plot::matplotPanelP::MatPlotPanelE4, 118
- parkAui::plot::matplotPanelP::MatPlotPanelF, 120
  - \_\_init \_\_\_, 120
- parkAui::plot::matplotPanelP::MatPlotPanelP, 121
- parkAui::plot::plotPanel::GeneralPlotProperty, 83
  - \_\_init \_\_\_, 83
- parkAui::plot::plotPanel::LineAttribute, 94
- parkAui::plot::plotPanel::MarkerAttribute, 104
- parkAui::plot::plotPanel::PlotAttribute, 149
  - \_\_init \_\_\_, 149
  - lineAttributes, 149
  - title, 149
- parkAui::plot::plotPanel::PlotPanel, 159
  - SetLogScale, 159
- parkAui::plot::plotPanelE3::PlotFrameE3, 152
  - \_\_init \_\_\_, 152
  - init\_plot\_data, 152
- parkAui::plot::plotPanelE3::PlotPanelE3, 160
  - GetRepeatUnit, 160
  - IsYErrorbar, 160
  - SetYErrorbar, 160
- parkAui::plot::plotPanelE4::PlotFrameE4, 153
- parkAui::plot::plotPanelE4::PlotPanelE4, 161
  - GetRepeatUnit, 161
- parkAui::plot::plotPanelEF::PlotFrameEF, 154
  - \_\_init \_\_\_, 154
  - init\_plot\_data, 154
- parkAui::plot::plotPanelEF::PlotPanelEF, 162
  - GetRepeatUnit, 162
- parkAui::plot::plotPanelF::PlotFrameF, 155
  - \_\_init \_\_\_, 155
  - init\_plot\_data, 155

- parkAui::plot::plotPanelF::PlotPanelF, 163
  - GetRepeatUnit, 163
- parkAui::plot::plotPanelP::PlotFrameP, 156
  - \_\_init \_\_, 156
  - init\_plot\_data, 156
  - init\_plot\_data0, 156
- parkAui::plot::plotPanelP::PlotPanelP, 164
  - \_\_init \_\_, 164
  - GetRepeatUnit, 164
- parkAui::plot::plotPanelR2::PlotFrameR2, 158
  - \_\_init \_\_, 158
  - init\_plot\_data, 158
- parkAui::plot::plotPanelR2::PlotPanelR2, 166
- parkAui::plot::plotPanelR::PlotFrameR, 157
  - \_\_init \_\_, 157
  - init\_plot\_data, 157
- parkAui::plot::plotPanelR::PlotPanelR, 165
  - GetRepeatUnit, 165
- parkAui::plot::polyErrorbar::PlotFrame, 151
  - \_\_init \_\_, 151
- parkAui::plot::polyErrorbar::PolyErrorbar, 167
- parkAui::xmlUtil::optimizer::Optimizer, 134
- parkAui::xmlUtil::serviceXml::ServiceXml, 193
  - \_\_init \_\_, 193
- parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 194
  - \_\_eq \_\_, 196
  - \_\_init \_\_, 194
  - addChild, 195
  - clone, 196
  - getAnonymousChild, 195
  - getAnonymousChildren, 195
  - getAnonymousChildrenCount, 194
  - getChildNames, 194
  - getChildren, 195
  - getChildrenCount, 195
  - getNamedChild, 195
  - getNamedChildren, 195
  - getNamedChildrenCount, 194
  - getText, 196
  - removeAnomynous, 196
  - removeChild, 196
  - setChild, 195
- parkAui::xmlUtil::serviceXmlAttr::ServiceXmlAttr, 197
  - \_\_init \_\_, 197
- parkAui::xmlUtil::theory0::Theory, 201
- parkAui::xmlUtil::theory::Theory, 200
- parkAui::xmlUtil::xmlAttribute::XmlAttribute, 202
- parkAui::xmlUtil::xmlConstrain::XmlConstrain, 203
- parkAui::xmlUtil::xmlConstrain::XmlConstrains, 204
- parkAui::xmlUtil::xmlData::XmlData, 205
- parkAui::xmlUtil::xmlDataArray::XmlDataArray, 207
- parkAui::xmlUtil::xmlDataMatrix::XmlDataMatrix, 208
- parkAui::xmlUtil::xmlDataMeta::XmlInstrumentData, 224
- parkAui::xmlUtil::xmlDataMeta::XmlMetaData, 241
- parkAui::xmlUtil::xmlDataNArray::XmlDataNArray, 209
- parkAui::xmlUtil::xmlDataObject::XmlDataObject, 210
- parkAui::xmlUtil::xmlDataReduction::XmlReductionData, 252
- parkAui::xmlUtil::xmlDataset::XmlDataset, 212
- parkAui::xmlUtil::xmlDataTheory::XmlTheoryData, 263
- parkAui::xmlUtil::xmlFitting::XmlFitting, 213
- parkAui::xmlUtil::xmlFittingJob::XmlFittingJob, 214
- parkAui::xmlUtil::xmlJob::XmlJob, 228
- parkAui::xmlUtil::xmlJob::XmlJobList, 234
- parkAui::xmlUtil::xmlJobReply::XmlJobReply, 235
- parkAui::xmlUtil::xmlJobReply::XmlJobReplyData, 236
- parkAui::xmlUtil::xmlJobStatus::XmlJobStatus, 240
  - \_\_init \_\_, 240
- parkAui::xmlUtil::xmlModel::XmlModel, 242
- parkAui::xmlUtil::xmlMultiplexor::XmlMultiplexor, 243
- parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 244
  - \_\_eq \_\_, 246
  - addChild, 245
  - clone, 246
  - getAnonymousChild, 245
  - getAnonymousChildren, 245
  - getAnonymousChildrenCount, 244
  - getChildNames, 244
  - getChildren, 245
  - getChildrenCount, 245
  - getNamedChild, 245
  - getNamedChildren, 245
  - getNamedChildrenCount, 244

- getText, 246
  - removeChildren, 246
  - setChild, 245
- parkAui::xmlUtil::xmlObject::XmlObject, 247
- parkAui::xmlUtil::xmlOptimizer::XmlOptimizer, 248
- parkAui::xmlUtil::xmlOptResults::XmlOptResults, 249
- parkAui::xmlUtil::xmlParameter::XmlParameter, 250
- parkAui::xmlUtil::xmlVariable::XmlVariable, 264
- parkAui::xmlUtil::xmlVariable::XmlVariables, 265
- parkUI::networkThread::NetworkClient, 127
- parkUI::networkThread::NetworkThread, 130
- parkUI::reply::ParkReply, 144
- parkUI::replyEcho::ParkReplyEcho, 145
- parse
  - servers::serviceClientMap::ServiceClientMapIn, 177
  - servers::serviceClientMap::ServiceClientMapOut, 179
  - servers::serviceMap::ServiceMapIn, 183
  - servers::serviceMap::ServiceMapOut, 185
  - servers::serviceService::ServiceIn, 181
  - servers::serviceService::ServiceOut, 186
  - servers::xmlTask::XmlTask, 260
- parseNode
  - servers::job::Job, 85
  - servers::xmlDatasetSvr::XmlDataset, 211
  - servers::xmlGroup::XmlGroup, 218
  - servers::xmlJobGroup::XmlGroup, 216
  - servers::xmlJobGroupReduce::XmlGroupReduce, 222
  - servers::xmlJobList::XmlJobList, 232
  - servers::xmlJobSvr::XmlJob, 226
  - servers::xmlReduceJob::XmlReduceJob, 251
  - servers::xmlResource::XmlGroupDependence, 219
  - servers::xmlResource::XmlJobDependence, 229
  - servers::xmlResource::XmlResource, 253
- parseString
  - servers::replySession::ReplySession, 173
  - servers::xmlGroupSession::XmlSession, 258
  - servers::xmlJobSession::XmlJobSession, 238
- servers::xmlSession::XmlSession, 256
- servers::xmlTask::XmlTask, 261
- postjob
  - servers::xmlGroup::XmlGroup, 218
  - servers::xmlGroupSession::XmlSession, 258
  - servers::xmlJobSession::XmlJobSession, 239
  - servers::xmlSession::XmlSession, 256
- printInfo
  - servers::msgQueue::MsgQueue, 123
  - servers::msgQueue::MsgQueueSys, 126
- processDataSet
  - servers::xmlJobSvr::XmlJob, 227
- processRequest
  - servers::mapService::MapService, 102
- put
  - servers::archiveSys::ArchiveSystem, 15
  - servers::queueFifo::FifoQueue, 35
  - servers::queueSys::QueueSys, 171
  - servers::storageSys::StorageSystem, 198
- putFinishQ
  - servers::queueSys::QueueSys, 171
- putMsg
  - servers::msgQueue::MsgQueue, 123
  - servers::msgQueue::MsgQueueSys, 125
- putOutput
  - servers::queueSys::QueueSys, 172
- putRunQ
  - servers::queueSys::QueueSys, 171
- qsize
  - servers::queueFifo::FifoQueue, 34
- reducejob
  - servers::xmlJobGroup::XmlGroup, 216
- refMsg
  - servers::msgQueue::MsgQueue, 123
  - servers::msgQueue::MsgQueueSys, 126
- remove
  - servers::msgQueue::MsgQueueSys, 125
  - servers::queueAbstract::AbstractQueue, 14
  - servers::queueFifo::FifoQueue, 35
  - servers::queueNormal::NormalQueue, 132
  - servers::queuePriority::PriorityQueue, 168
  - servers::queueSys::QueueSys, 171
- removeAnonymous
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 196
- removeChild

- parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 20
- \_\_repr\_\_, 21
- removeChildren
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 21
  - getService, 21
  - setService, 21
  - showps, 21
  - startServices, 20
  - stopServices, 20
- removeID
  - servers::queueNormal::NormalQueue, 133
  - servers::queuePriority::PriorityQueue, 169
- reset
  - servers::replySession::ReplySession, 173
  - servers::xmlGroupSession::XmlSession, 258
  - servers::xmlJobSession::XmlJobSession, 238
  - servers::xmlResource::XmlGroupDependence, 219
  - servers::xmlResource::XmlJobDependence, 229
  - servers::xmlSession::XmlSession, 256
- run
  - servers::cluster::ClusterService, 23
  - servers::serviceService::ServiceCommand, 180
  - servers::serviceService::ServiceProcess, 187
  - servers::serviceService::ServiceProcess\_old, 189
  - servers::serviceService::ServiceThread, 192
- saveInfo
  - servers::xmlTask::XmlTask, 261
- search
  - servers::queueAbstract::AbstractQueue, 14
  - servers::queueNormal::NormalQueue, 132
  - servers::queuePriority::PriorityQueue, 168
- servers::archiveSys::ArchiveSystem, 15
  - get, 15
  - open, 15
  - put, 15
- servers::cluster::Cluster, 18
  - \_\_init\_\_, 18
  - \_\_repr\_\_, 19
  - config, 18
  - getFullNames, 18
  - getIPs, 18
  - getNames, 18
- servers::cluster::ClusterController, 20
  - \_\_del\_\_, 21
  - \_\_init\_\_, 20
  - \_\_repr\_\_, 21
  - getCluster, 20
  - getNode, 21
  - getService, 21
  - setService, 21
  - showps, 21
  - startServices, 20
  - stopServices, 20
- servers::cluster::ClusterNode, 22
  - \_\_init\_\_, 22
- servers::cluster::ClusterService, 23
  - \_\_init\_\_, 23
  - run, 23
- servers::job::Job, 84
  - \_\_init\_\_, 85
  - \_\_repr\_\_, 85
  - getTaskXmlString, 85
  - parseNode, 85
- servers::jobQueue::JobQueueException, 92
  - \_\_init\_\_, 92
  - \_\_str\_\_, 92
- servers::mapClient::MapClient, 95
  - \_\_init\_\_, 96
  - collect\_incoming\_data, 96
  - found\_terminator, 96
  - getErrorMsg, 97
  - handle\_close, 96
  - handle\_connect, 96
  - handle\_error, 96
  - handle\_expt, 96
  - handle\_read, 96
  - handle\_write, 96
  - killJob, 97
  - works, 97
  - writable, 96
- servers::mapServer::MapServer, 98
  - \_\_del\_\_, 100
  - \_\_init\_\_, 99
  - getMsgQueue, 99
  - getReduceSys, 99
  - getSysQueue, 99
  - getToken, 99
  - handle\_accept, 99
  - handle\_close, 99
  - handle\_connect, 99
  - log, 100
  - log\_info, 100
  - tryConnects, 99
  - updateToken, 99
- servers::mapService::MapService, 101
  - \_\_init\_\_, 102
  - collect\_incoming\_data, 102
  - found\_terminator, 102

- getErrorMsg, 103
- handle\_close, 102
- handle\_connect, 102
- handle\_error, 103
- handle\_expt, 103
- handle\_read, 102
- handle\_write, 102
- hasMsg, 102
- killJob, 103
- processRequest, 102
- writable, 102
- servers::msgQueue::MsgQueue, 123
  - \_\_init \_\_, 123
  - empty, 123
  - hasMsg, 123
  - printInfo, 123
  - putMsg, 123
  - refMsg, 123
- servers::msgQueue::MsgQueueSys, 125
  - \_\_init \_\_, 125
  - clean, 125
  - getKeys, 126
  - hasMsg, 125
  - hasMsgs, 125
  - printInfo, 126
  - putMsg, 125
  - refMsg, 126
  - remove, 125
- servers::queueAbstract::AbstractQueue, 13
  - \_\_init \_\_, 13
  - change, 14
  - remove, 14
  - search, 14
  - show, 13
  - showOut, 13
- servers::queueFifo::FifoQueue, 34
  - \_\_init \_\_, 34
  - empty, 34
  - full, 34
  - get, 35
  - getid, 35
  - put, 35
  - qsize, 34
  - remove, 35
  - show, 35
  - showOut, 35
- servers::queueNormal::NormalQueue, 132
  - \_\_init \_\_, 132
  - change, 132
  - remove, 132
  - removeID, 133
  - search, 132
  - show, 132
  - showOut, 132
- servers::queuePriority::PriorityQueue, 168
  - \_\_init \_\_, 168
  - change, 168
  - remove, 168
  - removeID, 169
  - search, 168
  - show, 168
  - showOut, 168
- servers::queueSys::Job, 87
  - \_\_gt \_\_, 87
  - \_\_init \_\_, 87
  - \_\_repr \_\_, 87
- servers::queueSys::QueueSys, 170
  - \_\_init \_\_, 171
  - activate, 171
  - delOutputQ, 172
  - empty, 172
  - get, 171
  - getOutputQ, 172
  - getRunQ, 171
  - hasJobs, 171
  - isRunQempty, 171
  - put, 171
  - putFinishQ, 171
  - putOutput, 172
  - putRunQ, 171
  - remove, 171
  - showAll, 172
- servers::replySession::ReplySession, 173
  - \_\_init \_\_, 173
  - \_\_repr \_\_, 174
  - parseString, 173
  - reset, 173
- servers::service::Service, 175
  - \_\_init \_\_, 175
  - collect\_incoming\_data, 175
  - found\_terminator, 175
  - getErrorMsg, 176
  - handle\_close, 176
  - handle\_error, 176
  - handle\_expt, 176
  - handle\_read, 175
  - handle\_write, 176
  - writable, 176
- servers::serviceClientMap::ServiceClientMapIn, 177
  - \_\_init \_\_, 177
  - getChisq, 178
  - getExitCode, 178
  - getGroupID, 178
  - getJobID, 177
  - getMsg, 177
  - getSessionID, 178
  - getStatus, 178

- getUser, 177
- hasExitCode, 178
- parse, 177
- servers::serviceClientMap::ServiceClientMapOut, 179
  - \_\_init \_\_\_, 179
  - parse, 179
- servers::serviceMap::ServiceMapIn, 183
  - \_\_init \_\_\_, 183
  - getGroupIDs, 184
  - getJobInfo, 184
  - getSession, 183
  - getSessionID, 184
  - getSessionName, 183
  - getType, 183
  - getUser, 183
  - parse, 183
- servers::serviceMap::ServiceMapOut, 185
  - \_\_init \_\_\_, 185
  - parse, 185
- servers::serviceServer::ServiceServer, 190
  - \_\_init \_\_\_, 190
  - handle\_accept, 190
  - handle\_close, 190
  - handle\_connect, 190
  - log, 190
  - log\_info, 191
- servers::serviceService::ServiceCommand, 180
  - \_\_init \_\_\_, 180
  - msg, 180
  - run, 180
- servers::serviceService::ServiceIn, 181
  - \_\_init \_\_\_, 181
  - doCommandWork, 181
  - doProcessWork, 182
  - doThreadWork, 182
  - getCmd, 181
  - getCommand, 182
  - getId, 181
  - getJobID, 182
  - getPid, 181
  - getRunType, 182
  - getTask, 182
  - parse, 181
- servers::serviceService::ServiceOut, 186
  - \_\_init \_\_\_, 186
  - parse, 186
- servers::serviceService::ServiceProcess, 187
  - \_\_init \_\_\_, 187
  - msg, 187
  - run, 187
- servers::serviceService::ServiceProcess\_old, 189
  - \_\_init \_\_\_, 189
  - run, 189
- servers::serviceService::ServiceThread, 192
  - \_\_init \_\_\_, 192
  - run, 192
- servers::storageSys::StorageSystem, 198
  - getKeys, 198
  - put, 198
- servers::xmlDatasetSvr::XmlData, 206
- servers::xmlDatasetSvr::XmlDataset, 211
  - \_\_init \_\_\_, 211
  - parseNode, 211
- servers::xmlGroup::XmlGroup, 217
  - \_\_init \_\_\_, 218
  - \_\_repr \_\_\_, 218
  - getDeps, 218
  - getGroupJob, 218
  - getJobs, 218
  - parseNode, 218
  - postjob, 218
- servers::xmlGroupSession::XmlSession, 257
  - \_\_init \_\_\_, 258
  - \_\_repr \_\_\_, 258
  - getJobs, 258
  - getSessionJob, 258
  - parseString, 258
  - postjob, 258
  - reset, 258
- servers::xmlJobGroup::XmlGroup, 215
  - \_\_init \_\_\_, 216
  - \_\_repr \_\_\_, 216
  - getDeps, 216
  - getJobs, 216
  - getMapJob, 216
  - getReduceJob, 216
  - parseNode, 216
  - reducejob, 216
- servers::xmlJobGroupReduce::XmlGroupInfo, 221
  - \_\_init \_\_\_, 221
  - \_\_repr \_\_\_, 221
- servers::xmlJobGroupReduce::XmlGroupReduce, 222
  - \_\_init \_\_\_, 222
  - \_\_repr \_\_\_, 223
  - getJobs, 222
  - parseNode, 222
- servers::xmlJobList::XmlJobList, 231
  - \_\_init \_\_\_, 232
  - \_\_repr \_\_\_, 233
  - addXmlAttr, 233
  - addXmlAttr0, 233
  - clone, 232
  - getDeps, 232

- getTaskXmlString, 233
- hasDeps, 232
- parseNode, 232
- toXmlAttr, 233
- toXmlAttr0, 233
- toXmlCompactString, 233
- toXmlFullString, 233
- toXmlString, 233
- servers::xmlJobSession::XmlJobSession, 237
  - \_\_init \_\_, 238
  - \_\_repr \_\_, 238
  - getChildren, 238
  - getJobs, 238
  - getSessionJob, 238
  - parseString, 238
  - postjob, 239
  - reset, 238
- servers::xmlJobSvr::XmlJob, 225
  - \_\_init \_\_, 226
  - \_\_repr \_\_, 227
  - addXmlAttr, 227
  - clone, 226
  - getDeps, 226
  - getTaskXmlString, 227
  - hasDeps, 226
  - parseNode, 226
  - processDataSet, 227
  - toXmlAttr, 227
  - toXmlCompactString, 227
  - toXmlFullString, 227
  - toXmlString, 227
- servers::xmlReduceJob::XmlReduceJob, 251
  - \_\_init \_\_, 251
  - \_\_repr \_\_, 251
  - clone, 251
  - parseNode, 251
- servers::xmlResource::XmlGroupDependence, 219
  - \_\_init \_\_, 219
  - \_\_repr \_\_, 220
  - getDepsID, 219
  - getDepsValue, 219
  - hasDeps, 220
  - parseNode, 219
  - reset, 219
- servers::xmlResource::XmlJobDependence, 229
  - \_\_init \_\_, 229
  - \_\_repr \_\_, 230
  - getDeps, 230
  - getDepsID, 229
  - getDepsValue, 229
  - hasDeps, 230
  - parseNode, 229
  - reset, 229
- servers::xmlResource::XmlResource, 253
  - \_\_init \_\_, 253
  - \_\_repr \_\_, 253
  - clone, 253
  - parseNode, 253
  - toXmlNode, 254
  - toXmlString, 253
- servers::xmlSession::XmlSession, 255
  - \_\_init \_\_, 256
  - \_\_repr \_\_, 256
  - getJobs, 256
  - getSessionJob, 256
  - parseString, 256
  - postjob, 256
  - reset, 256
- servers::xmlTask::TaskSession, 199
  - \_\_init \_\_, 199
- servers::xmlTask::XmlTask, 259
  - \_\_init \_\_, 260
  - \_\_repr \_\_, 261
  - getArgs, 261
  - getCmd, 261
  - getCommand, 261
  - getEnv, 261
  - getFullArgs, 261
  - getPostFuncArgs, 262
  - getPreFuncArgs, 262
  - getTaskSession, 261
  - parse, 260
  - parseString, 261
  - saveInfo, 261
- setChild
  - parkAui::xmlUtil::serviceXmlAnonymous::ServiceXmlAnonymous, 195
  - parkAui::xmlUtil::xmlNamedObject::XmlNamedObject, 245
- SetFinishedReply
  - parkAui::common::replyEvent::ParkReplyEvent, 147
- SetLogScale
  - parkAui::plot::plotPanel::PlotPanel, 159
- SetReply
  - parkAui::common::replyEvent::ParkReplyEvent, 146
- SetResultsReply
  - parkAui::common::replyEvent::ParkReplyEvent, 147
- SetRunningReply
  - parkAui::common::replyEvent::ParkReplyEvent, 147
- setService
  - servers::cluster::ClusterController, 21
- SetStartReply

- parkAui::common::replyEvent::ParkReplyEvent, 147
- SetSubmitReply
  - parkAui::common::replyEvent::ParkReplyEvent, 147
- SetYErrorbar
  - parkAui::plot::plotPanelE3::PlotPanelE3, 160
- show
  - servers::queueAbstract::AbstractQueue, 13
  - servers::queueFifo::FifoQueue, 35
  - servers::queueNormal::NormalQueue, 132
  - servers::queuePriority::PriorityQueue, 168
- showAll
  - servers::queueSys::QueueSys, 172
- showOut
  - servers::queueAbstract::AbstractQueue, 13
  - servers::queueFifo::FifoQueue, 35
  - servers::queueNormal::NormalQueue, 132
  - servers::queuePriority::PriorityQueue, 168
- showps
  - servers::cluster::ClusterController, 21
- startServices
  - servers::cluster::ClusterController, 20
- stopServices
  - servers::cluster::ClusterController, 20
- title
  - parkAui::plot::matplotPanel::MatPlotAttribute, 106
  - parkAui::plot::plotPanel::PlotAttribute, 149
- toXmlAttr
  - servers::xmlJobList::XmlJobList, 233
  - servers::xmlJobSvr::XmlJob, 227
- toXmlAttr0
  - servers::xmlJobList::XmlJobList, 233
- toXmlCompactString
  - servers::xmlJobList::XmlJobList, 233
  - servers::xmlJobSvr::XmlJob, 227
- toXmlFullString
  - servers::xmlJobList::XmlJobList, 233
  - servers::xmlJobSvr::XmlJob, 227
- toXmlNode
  - servers::xmlResource::XmlResource, 254
- toXmlString
  - servers::xmlJobList::XmlJobList, 233
  - servers::xmlJobSvr::XmlJob, 227
- servers::xmlResource::XmlResource, 253
- tryConnects
  - servers::mapServer::MapServer, 99
- updateToken
  - servers::mapServer::MapServer, 99
- works
  - servers::mapClient::MapClient, 97
- writable
  - servers::mapClient::MapClient, 96
  - servers::mapService::MapService, 102
  - servers::service::Service, 176