

Schema sc-3.0.xsd

schema location: <C:\Documents and Settings\gmehta\Desktop\sc-3.0.1.xsd>
targetNamespace: <http://pegasus.isi.edu/schema/sitecatalog>

Elements	Complex types	Simple types	Attr. groups
sitecatalog	DirectoryType	ArchitectureType	SystemInformationGroup
	FileServerType	GridType	
	FileSystemType	JobType	
	StorageType	OSType	
		ProfileNamespace	
		SchedulerType	

element sitecatalog

diagram	<pre> classDiagram class sitecatalog { <<root element aggregating all sites information there is.>> } class site { <<Describes a single site>> } sitecatalog "1..>" site </pre>												
children	site												
attributes	<table> <tr> <td>Name</td><td>Type</td><td>Use</td><td>Default</td><td>Fixed</td><td>Annotation</td></tr> <tr> <td>version</td><td>xs:decimal</td><td>optional</td><td>3.0</td><td></td><td></td></tr> </table>	Name	Type	Use	Default	Fixed	Annotation	version	xs:decimal	optional	3.0		
Name	Type	Use	Default	Fixed	Annotation								
version	xs:decimal	optional	3.0										
annotation	documentation root element aggregating all sites information there is.												

element sitecatalog/site

diagram	<pre> classDiagram class site { <<Describes a single site>> } class grid { <<Each site supports various (usually two) jobmanagers.>> } class head-fs { <<grid>> } class worker-fs { <<grid>> } class replica-catalog { <<Each site may report to multiple LRCs.>> } class profile { <<Administrative profile defaults associated with a site,>> } site "0..>" grid grid "0..>" head-fs grid "0..>" worker-fs grid "0..>" replica-catalog grid "0..>" profile </pre>																																										
children	grid head-fs worker-fs replica-catalog profile																																										
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annotation	documentation Describes a single site																																										

element sitecatalog/site/grid

diagram	<pre> classDiagram class site { <<Describes a single site>> } class grid { <<Each site supports various (usually two) jobmanagers.>> } site "0..>" grid </pre>
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	Name	Type	Use	Default	Fixed	Annotation
	type	GridType	required			documentation The universe name is actually the primary key for the jobmanager identification.
	contact	xs:string	required			documentation The contact string is the secondary key for any job manager.
	scheduler	SchedulerType	required			
	jobtype	JobType	optional			
	free-mem	xs:string	optional			
	total-mem	xs:string	optional			
	max-count	xs:string	optional			
	max-cpu-time	xs:string	optional			
	running-jobs	xs:nonNegativeInteger	optional			
	jobs-in-queue	xs:nonNegativeInteger	optional			
	idle-nodes	xs:nonNegativeInteger	optional			
	total-nodes	xs:nonNegativeInteger	optional			
	arch	ArchitectureType	optional	x86		
	os	OSType	optional			LINUX
	osrelease	xs:string	optional			
	osversion	xs:string	optional			
	glibc	xs:string	optional			
annotation	documentation Each site supports various (usually two) jobmanagers.					

element sitecatalog/site/head-fs

diagram	<pre> classDiagram class head-fs class scratch class storage class profile head-fs "3..4" --> scratch head-fs "3..4" --> storage head-fs "3..4" --> "0..oo" profile </pre> <p>Administrative profile defaults associated with a site.</p>
children	scratch storage profile

element sitecatalog/site/head-fs/scratch

diagram	<pre> classDiagram class scratch class StorageType class local class shared scratch --> StorageType StorageType "2..3" --> local StorageType "2..3" --> shared </pre> <p>Information about the local directory on a Node</p> <p>Information about the shared directory on the Cluster</p>
type	StorageType
children	local shared

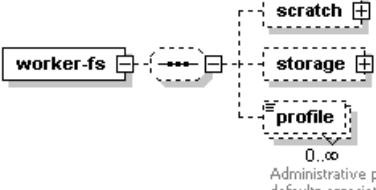
element sitecatalog/site/head-fs/storage

diagram	<pre> classDiagram class storage class StorageType class local class shared storage --> StorageType StorageType "2..3" --> local StorageType "2..3" --> shared </pre> <p>Information about the local directory on a Node</p> <p>Information about the shared directory on the Cluster</p>
type	StorageType
children	local shared

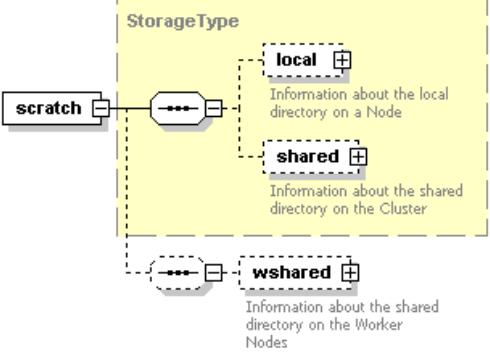
element sitecatalog/site/head-fs/profile

diagram													
	Administrative profile defaults associated with a site.												
type	extension of <code>xs:string</code>												
attributes	<table> <tr> <td>Name</td><td>Type</td><td>Use</td><td>Default</td><td>Fixed</td><td>Annotation</td></tr> <tr> <td>namespace key</td><td>ProfileNamespace <code>xs:string</code></td><td>required</td><td>required</td><td></td><td></td></tr> </table>	Name	Type	Use	Default	Fixed	Annotation	namespace key	ProfileNamespace <code>xs:string</code>	required	required		
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annotation	documentation Administrative profile defaults associated with a site.												

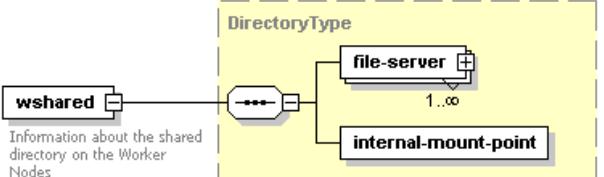
element `sitemcatalog/site/worker-fs`

diagram	
	<p>scratch storage profile</p> <p>0..∞</p> <p>Administrative profile defaults associated with a site.</p>
children	scratch storage profile

element `sitemcatalog/site/worker-fs/scratch`

diagram	
	<p>StorageType</p> <p>local shared</p> <p>Information about the local directory on a Node</p> <p>Information about the shared directory on the Cluster</p> <p>wshared</p> <p>Information about the shared directory on the Worker Nodes</p>
type	extension of StorageType
children	local shared wshared

element `sitemcatalog/site/worker-fs/scratch/wshared`

diagram	
	<p>DirectoryType</p> <p>file-server internal-mount-point</p> <p>1..∞</p>
type	DirectoryType
children	file-server internal-mount-point
annotation	documentation Information about the shared directory on the Worker Nodes

element `sitemcatalog/site/worker-fs/storage`

diagram	<pre> classDiagram StorageType < -- storage StorageType < -- local StorageType < -- shared StorageType < -- wshared </pre> <p>StorageType</p> <ul style="list-style-type: none"> storage: Information about the local directory on a Node local: Information about the shared directory on the Cluster wshared: Information about the shared directory on the Worker Nodes
type	extension of StorageType
children	local shared wshared

element sitecatalog/site/worker-fs/storage/wshared

diagram	<pre> classDiagram wshared < -- DirectoryType wshared --> file-server : 1..oo wshared --> internal-mount-point </pre> <p>DirectoryType</p> <ul style="list-style-type: none"> wshared: Information about the shared directory on the Worker Nodes file-server: 1..oo internal-mount-point
type	DirectoryType
children	file-server internal-mount-point
annotation	documentation Information about the shared directory on the Worker Nodes

element sitecatalog/site/worker-fs/profile

diagram	<pre> classDiagram profile </pre> <p>profile</p> <p>Administrative profile defaults associated with a site.</p>												
type	extension of xs:string												
attributes	<table> <thead> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Default</th> <th>Fixed</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>namespace key</td> <td>ProfileNamespace xs:string</td> <td>required required</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Name	Type	Use	Default	Fixed	Annotation	namespace key	ProfileNamespace xs:string	required required			
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namespace key	ProfileNamespace xs:string	required required											
annotation	documentation Administrative profile defaults associated with a site.												

element sitecatalog/site/replica-catalog

diagram	<pre> classDiagram replica-catalog < -- replica-catalog replica-catalog --> alias : 0..oo replica-catalog --> connection : 0..oo </pre> <p>Each site may report to multiple LRCs.</p>												
children	alias connection												
attributes	<table> <thead> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Default</th> <th>Fixed</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>type url</td> <td>xs:string xs:string</td> <td>required required</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Name	Type	Use	Default	Fixed	Annotation	type url	xs:string xs:string	required required			
Name	Type	Use	Default	Fixed	Annotation								
type url	xs:string xs:string	required required											
annotation	documentation Each site may report to multiple LRCs.												

element sitecatalog/site/replica-catalog/alias

diagram	
attributes	Name Type Use Default Fixed Annotation name xs:string required

element **siterecatalog/site/replica-catalog/connection**

diagram	
type	extension of xs:string
attributes	Name Type Use Default Fixed Annotation key xs:string required

element **siterecatalog/site/profile**

diagram	 Administrative profile defaults associated with a site.
type	extension of xs:string
attributes	Name Type Use Default Fixed Annotation namespace ProfileNamespace required key xs:string required
annotation	documentation Administrative profile defaults associated with a site.

complexType **DirectoryType**

diagram	
children	file-server internal-mount-point
used by	elements StorageType/local StorageType/shared siterecatalog/site/worker-fs/scratch/wshared siterecatalog/site/worker-fs/storage/wshared
annotation	documentation Defines a directory's external and internal view/mount-point and access parameters

element **DirectoryType/file-server**

diagram	
type	FileServerType
children	profile
attributes	Name Type Use Default Fixed Annotation protocol xs:string required url xs:anyURI required mount-point xs:string required

element **DirectoryType/internal-mount-point**

diagram	
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type	FileSystemType																								
attributes	<table> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Default</th> <th>Fixed</th> <th>Annotation</th> </tr> <tr> <td>mount-point</td> <td>xs:string</td> <td>required</td> <td></td> <td></td> <td></td> </tr> <tr> <td>free-size</td> <td>xs:string</td> <td>optional</td> <td></td> <td></td> <td></td> </tr> <tr> <td>total-size</td> <td>xs:string</td> <td>optional</td> <td></td> <td></td> <td></td> </tr> </table>	Name	Type	Use	Default	Fixed	Annotation	mount-point	xs:string	required				free-size	xs:string	optional				total-size	xs:string	optional			
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complexType **FileServerType**

diagram	<p>FileServerType — profile 0..oo Administrative profile defaults associated with a site.</p>																								
children	profile																								
used by	element DirectoryType/file-server																								
attributes	<table> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Default</th> <th>Fixed</th> <th>Annotation</th> </tr> <tr> <td>protocol</td> <td>xs:string</td> <td>required</td> <td></td> <td></td> <td></td> </tr> <tr> <td>url</td> <td>xs:anyURI</td> <td>required</td> <td></td> <td></td> <td></td> </tr> <tr> <td>mount-point</td> <td>xs:string</td> <td>required</td> <td></td> <td></td> <td></td> </tr> </table>	Name	Type	Use	Default	Fixed	Annotation	protocol	xs:string	required				url	xs:anyURI	required				mount-point	xs:string	required			
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protocol	xs:string	required																							
url	xs:anyURI	required																							
mount-point	xs:string	required																							
annotation	documentation Describes the files server to access data from outside																								

element **FileServerType/profile**

diagram	<p>profile Administrative profile defaults associated with a site.</p>																		
type	extension of xs:string																		
attributes	<table> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Default</th> <th>Fixed</th> <th>Annotation</th> </tr> <tr> <td>namespace</td> <td>ProfileNamespace</td> <td>required</td> <td></td> <td></td> <td></td> </tr> <tr> <td>key</td> <td>xs:string</td> <td>required</td> <td></td> <td></td> <td></td> </tr> </table>	Name	Type	Use	Default	Fixed	Annotation	namespace	ProfileNamespace	required				key	xs:string	required			
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namespace	ProfileNamespace	required																	
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annotation	documentation Administrative profile defaults associated with a site.																		

complexType **FileSystemType**

diagram	<p>FileSystemType Defines the internal view/mount point and its characteristics</p>																								
used by	element DirectoryType/internal-mount-point																								
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free-size	xs:string	optional																							
total-size	xs:string	optional																							
annotation	documentation Defines the internal view/mount point and its characteristics																								

complexType **StorageType**

diagram	<p>StorageType — local Information about the local directory on a Node StorageType — shared Information about the shared directory on the Cluster StorageType Describes the filesystem layout (shared and local) on a site</p>
children	local shared
used by	elements sitecatalog/site/head-fs/scratch sitecatalog/site/worker-fs/scratch sitecatalog/site/head-fs/storage sitecatalog/site/worker-fs/storage

annotation	documentation Describes the filesystem layout (shared and local) on a site
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element StorageType/local

diagram	<pre> classDiagram class local class DirectoryType { file-server internal-mount-point } local "1..oo" --> DirectoryType </pre>
type	DirectoryType
children	file-server internal-mount-point
annotation	documentation Information about the local directory on a Node

element StorageType/shared

diagram	<pre> classDiagram class shared class DirectoryType { file-server internal-mount-point } shared "1..oo" --> DirectoryType </pre>
type	DirectoryType
children	file-server internal-mount-point
annotation	documentation Information about the shared directory on the Cluster

simpleType ArchitectureType

type	restriction of xs:NMTOKENS
used by	attribute SystemInformationGroup/@arch
facets	enumeration x86 enumeration x86_64 enumeration ppc enumeration ppc_64 enumeration ia64 enumeration sparcv7 enumeration sparcv9 enumeration amd64
annotation	documentation Defines the valid architecture types

simpleType GridType

type	restriction of xs:NMTOKEN
used by	attribute sitecatalog/site/grid/@type
facets	enumeration gt2 enumeration gt4 enumeration gt5 enumeration condor enumeration condor-c enumeration pbs enumeration lsf
annotation	documentation Different Grid Type's Supported by Pegasus

simpleType JobType

type	restriction of xs:NMTOKEN
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used by	attribute sitecatalog/site/grid/@jobtype
facets	enumeration compute enumeration auxiliary enumeration transfer enumeration register enumeration cleanup
annotation	documentation Type of Jobs in the executable workflow this Grid Supports

simpleType OSType

type	restriction of xs:NMTOKENS
used by	attribute SystemInformationGroup/@os
facets	enumeration LINUX enumeration SUNOS enumeration AIX enumeration MACOSX enumeration WINDOWS
annotation	documentation Defines the valid OS types

simpleType ProfileNamespace

type	restriction of xs:NMTOKEN
used by	attributes sitecatalog/site/head-fs/profile/@namespace sitecatalog/site/worker-fs/profile/@namespace sitecatalog/site/profile/@namespace FileServerType/profile/@namespace
facets	enumeration pegasus enumeration condor enumeration dagman enumeration env enumeration hints enumeration globus
annotation	documentation defines the legal namespaces of execution profiles.

simpleType SchedulerType

type	restriction of xs:NMTOKEN
used by	attribute sitecatalog/site/grid/@scheduler
facets	enumeration Fork enumeration PBS enumeration LSF enumeration Condor enumeration SGE enumeration unknown
annotation	documentation Different Schedulers on the Grid

attributeGroup SystemInformationGroup

used by	elements sitecatalog/site/grid sitecatalog/site
attributes	Name Type Use Default Fixed Annotation arch ArchitectureType optional x86 os OSType optional LINUX osrelease xs:string optional osversion xs:string optional glibc xs:string optional
annotation	documentation Defines the attributes to define system information