

SCA v2.2 Requirements Database v2002-12-04

SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA1	The OS shall provide the functions and options designated as mandatory by the AEP defined in Appendix B.	3.1.1	Test	Shall	
SCA2	The OS and related file systems shall support at a minimum a file name length of 40 characters and at a minimum a combined pathname/filename length of 1024 characters.	3.1.1	Test	Shall	
SCA3	The OE shall use middleware that, at a minimum, provides the services and capabilities of minimumCORBA as specified by the OMG Document orbos/98-05-13, May 19, 1998.	3.1.2.1	Test	Shall	
SCA4	A CORBA Naming Service shall be provided in the OE.	3.1.2.2.1	Test	Shall	
SCA5	A CORBA Naming Service supplied by an OE shall support the CosNaming CORBA module and its NamingContext interface's operations: bind, bind_new_context, unbind, destroy, and resolve.	3.1.2.2.1	Test	Shall	
SCA6	These operations shall meet the requirements of OMG Document formal/00-11/01: Interoperable Naming Service Specification.	3.1.2.2.1	Test	Shall	SCA-CCM-028
SCA7	The "kind" element of each NameComponent shall be "" (null string).	3.1.2.2.1	Test	Shall	
SCA9	Log producers shall implement a configure property with an ID of "PRODUCER_LOG_LEVEL".	3.1.2.3.1	Test	Shall	
SCA10	The type of this property shall be a LogLevelSequence.	3.1.2.3.1	Test	Shall	
SCA11	Only the messages that contain an enabled log level shall be sent by a log producer to a Log.	3.1.2.3.1	Test	Shall	
SCA12	Log producers shall use their component identifier in the producerId field of the ProducerLogRecord.	3.1.2.3.1	Test	Shall	
SCA13	Log producers shall operate normally in the case where the connections to a Log are nil or an invalid reference.	3.1.2.3.1	Test	Shall	SCA-CCM-025

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SCA14	Log producers shall output only those log records that correspond to enabled LogLevelType values.	3.1.2.3.1	Test	Shall	
SCA29	The getMaxSize operation shall return the integer number of bytes that the Log is capable of storing.	3.1.2.3.3.5 .1.4	Test	Conditional	
SCA30	The setMaxSize operation shall set the maximum size of the log measured in number of bytes.	3.1.2.3.3.5 .2.3	Test	Conditional	
SCA31	The setMaxSize operation shall raise the InvalidParam exception if the size parameter passed in is less than the current size of the Log.	3.1.2.3.3.5 .2.5	Test	Conditional	
SCA32	The setMaxSize operation shall raise the InvalidParam exception if the input size parameter is greater than the storage space available to the Log.	3.1.2.3.3.5 .2.5	Test	Conditional	
SCA33	The getCurrentSize operation shall return the current size of the log storage in bytes.	3.1.2.3.3.5 .3.4	Test	Conditional	
SCA34	The getNumRecords operation shall return the current number of LogRecords contained in the Log.	3.1.2.3.3.5 .4.4	Test	Conditional	
SCA35	The getLogFullAction operation shall return the Log's log full action setting.	3.1.2.3.3.5 .5.4	Test	Conditional	
SCA36	The setLogFullAction operation shall set the action taken by a Log, when its maximum size has been reached, to the value specified in the action parameter.	3.1.2.3.3.5 .6.3	Test	Conditional	
SCA37	The getAvailabilityStatus operation shall return the current availability status of the Log.	3.1.2.3.3.5 .7.4	Test	Conditional	
SCA38	The getAdministrativeState operation shall return the current administrative state of the Log.	3.1.2.3.3.5 .8.4	Test	Conditional	
SCA39	The setAdministrativeState operation shall set the administrative state of the Log.	3.1.2.3.3.5 .9.3	Test	Conditional	

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SCA40	The getOperationalState operation shall return the current operational state of the Log.	3.1.2.3.3.5 .10.4	Test	Conditional	
SCA41	The writeRecords operation shall add each log record supplied in the records parameter to the Log.	3.1.2.3.3.5 .11.3	Test	Conditional	
SCA42	When there is insufficient storage to add one of the supplied log records to the Log, and the LogFullAction is set to HALT, the writeRecords method shall set the availability status logFull state to true (e.g., If 3 records are provided in the records parameter, and while trying to write the second record to the log, the record will not fit, then the log is considered to be full. Therefore, the second and third records will not be stored in the log but the first record would have been successfully stored.).	3.1.2.3.3.5 .11.3	Test	Conditional	SCA-CCM-023
SCA43	The writeRecords operation shall write the current local time to the time field of each record written to the Log.	3.1.2.3.3.5 .11.3	Test	Conditional	
SCA44	The writeRecords operation shall assign a unique record Id to the id field of the LogRecord.	3.1.2.3.3.5 .11.3	Test	Conditional	
SCA45	Log records accepted for storage by the writeRecords shall be available for retrieval in the order received.	3.1.2.3.3.5 .11.3	Test	Conditional	
SCA47	If the Log does not contain a record that meets the criteria provided, then the RecordIdType returned shall correspond to the next record that will be recorded in the future.	3.1.2.3.3.5 .12.3	Test	Conditional	SCA-CCM-023;SCA-CCM-028
SCA48	If the Log does not contain a record that meets the criteria provided, then the RecordIdType returned shall correspond to the next record that will be recorded in the future.	3.1.2.3.3.5 .12.4	Test	Conditional	SCA-CCM-028

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SCA49	The retrieveById operation shall set the inout parameter currentId to the LogRecord Id of the record following the last record in the LogRecordSequence returned.	3.1.2.3.3.5 .13.3	Test	Conditional	
SCA50	If the record sequence returned exhausts the log records, then the currentId parameter shall be set to the LogRecordId of where the log will resume writing logs on the next write.	3.1.2.3.3.5 .13.3	Test	Conditional	SCA-CCM-023
SCA51	The retrieveById operation shall return a LogRecordSequence that begins with the record specified by the currentId parameter.	3.1.2.3.3.5 .13.4	Test	Conditional	
SCA52	The number of records in the LogRecordSequence returned by the retrieveById operation shall be equal to the number of records specified by the howMany parameter, or the number of records available if the number of records specified by the howMany parameter cannot be met.	3.1.2.3.3.5 .13.4	Test	Conditional	
SCA53	If the record specified by currentId does not exist, the retrieveById operation shall return an empty list of LogRecords and leave the currentId unchanged.	3.1.2.3.3.5 .13.4	Test	Conditional	SCA-CCM-023
SCA54	If the Log is empty, or has been exhausted, the retrieveById operation shall return an empty list of LogRecords and leave the currentId unchanged.	3.1.2.3.3.5 .13.4	Test	Conditional	SCA-CCM-023
SCA55	The clearLog operation shall delete all records from the Log.	3.1.2.3.3.5 .14.3	Test	Conditional	
SCA56	The clearLog operation shall set the current size of the Log storage to zero.	3.1.2.3.3.5 .14.3	Test	Conditional	
SCA57	The clearLog operation shall set the current number of records in the Log to zero.	3.1.2.3.3.5 .14.3	Test	Conditional	SCA-CCM-028
SCA58	The clearLog operation shall set the logFull availability status element to false.	3.1.2.3.3.5 .14.3	Test	Conditional	
SCA59	The destroy operation shall release all internal memory and/or storage allocated by the Log.	3.1.2.3.3.5 .15.3	Test	Conditional	SCA-CCM-029

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SCA60	The destroy operation shall tear down the component (i.e., released from the CORBA environment).	3.1.2.3.3.5 .15.3	Test	Conditional	
SCA61	A CORBA Event Service (e.g., OMG's Event Service) shall be provided in the OE.	3.1.2.4.1	Test	Shall	
SCA62	The CORBA Event Service shall support Push interfaces (PushConsumer and PushSupplier) of the CosEventComm CORBA module as described in OMG Document formal/01-03-01: Event Service, v1.1.	3.1.2.4.1	Test	Shall	
SCA63	A component (e.g., Resource, DomainManager, etc.) that consumes events shall implement the CosEventComm PushConsumer interface	3.1.2.4.1	Test	Shall	
SCA64	A component (e.g., Resource, Device, DomainManager, etc.) that produces events shall implement the CosEventComm PushSupplier interface and use the CosEventComm PushConsumer interface for generating the events.	3.1.2.4.1	Test	Shall	SCA-CCM-025
SCA65	A producer component shall handle all cases, without raising any exceptions outside of the producer component, due to the connections to a CosEventComm PushConsumer being nil or an invalid reference.	3.1.2.4.1	Test	Shall	
SCA66	The Incoming Domain Management Channel name shall be "IDM_Channel".	3.1.2.4.1	Test	Shall	
SCA67	The Outgoing Domain Management Channel name shall be "ODM_Channel".	3.1.2.4.1	Test	Shall	
SCA69	The connectPort operation shall make a connection to the component identified by the input parameters.	3.1.3.1.1.5 .1.3	Test	Shall	SCA-CCM-029
SCA70	The connectPort operation shall raise the InvalidPort exception when the input connection parameter is an invalid connection for this Port.	3.1.3.1.1.5 .1.5	Test	Shall	

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SCA71	The connectPort operation shall raise the OccupiedPort exception when unable to accept the connections because the Port is already fully occupied.	3.1.3.1.1.5 .1.5	Test	Shall	
SCA72	The disconnectPort operation shall break the connection to the component identified by the input parameter.	3.1.3.1.1.5 .2.3	Test	Shall	
SCA73	The disconnectPort operation shall raise the InvalidPort exception when the name passed to disconnectPort is not connected with the Port component.	3.1.3.1.1.5 .2.5	Test	Shall	
SCA74	The initialize operation shall raise an InitializeError exception when an initialization error occurs.	3.1.3.1.2.5 .1.5	Test	Shall	
SCA75	The releaseObject operation shall release all internal memory allocated by the component during the life of the component.	3.1.3.1.2.5 .2.3	Test	Shall	
SCA76	The releaseObject operation shall tear down the component (i.e. released from the CORBA environment).	3.1.3.1.2.5 .2.3	Test	Shall	
SCA77	The releaseObject operation shall release components from the OE.	3.1.3.1.2.5 .2.3	Test	Shall	SCA-CCM-028
SCA78	The releaseObject operation shall raise a ReleaseError exception when a release error occurs.	3.1.3.1.2.5 .2.5	Test	Shall	
SCA79	The runTest operation shall use the testId parameter to determine which of its predefined test implementations should be performed.	3.1.3.1.3.5 .1.3	Test	Shall	
SCA80	The testValues parameter CF Properties (id/value pair(s)) shall be used to provide additional information to the implementation-specific test to be run.	3.1.3.1.3.5 .1.3	Test	Shall	
SCA81	The runTest operation shall return the result(s) of the test in the testValues parameter.	3.1.3.1.3.5 .1.3	Test	Shall	

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SCA82	Valid testId(s) and both input and output testValues (properties) for the runTest operation shall at a minimum be test properties defined in the properties test element of the component's Properties Descriptor (refer to Appendix D Domain Profile).	3.1.3.1.3.5 .1.3	Test	Shall	
SCA83	All inputValues properties shall be validated (i.e., test properties defined in the propertyfile(s) referenced in the component's SPD).	3.1.3.1.3.5 .1.3	Test	Shall	
SCA84	The runTest operation shall not execute any testing when the input testId or any of the input testValues are not known by the component or are out of range.	3.1.3.1.3.5 .1.3	Inspection/ Analysis	Shall	
SCA85	The runTest operation shall raise the UnknownTest exception when there is no underlying test implementation that is associated with the input testId given.	3.1.3.1.3.5 .1.5	Test	Shall	
SCA86	The runTest operation shall raise the UnknownProperties exception when the input parameter testValues contains any DataTypes that are not known by the component's test implementation or any values that are out of range for the requested test.	3.1.3.1.3.5 .1.5	Test	Shall	
SCA87	The exception parameter invalidProperties shall contain the invalid inputValues properties id(s) that are not known by the component or the value(s) are out of range.	3.1.3.1.3.5 .1.5	Test	Shall	
SCA89	The getPort operation shall return the CORBA object reference that is associated with the input port name.	3.1.3.1.4.5 .1.4	Test	Shall	
SCA90	The getPort operation shall raise an UnknownPort exception if the port name is invalid.	3.1.3.1.4.5 .1.5	Test	Shall	
SCA91	The configure operation shall assign values to the properties as indicated in the configProperties argument.	3.1.3.1.5.5 .1.3	Test	Shall	

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SCA92	Valid properties for the configure operation shall at a minimum be the configure readwrite and writeonly properties referenced in the component's SPD.	3.1.3.1.5.5 .1.3	Test	Shall	
SCA93	The configure operation shall raise a PartialConfiguration exception when some configuration properties were successfully set and some configuration properties were not successfully set.	3.1.3.1.5.5 .1.5	Test	Shall	
SCA94	The configure operation shall raise an InvalidConfiguration exception when a configuration error occurs that prevents any property configuration on the component.	3.1.3.1.5.5 .1.5	Test	Shall	
SCA95	If the configProperties are zero size then, the query operation shall return all component properties.	3.1.3.1.5.5 .2.3	Test	Shall	SCA-CCM-023
SCA96	If the configProperties are not zero size, then the query operation shall return only those id/value pairs specified in the configProperties.	3.1.3.1.5.5 .2.3	Test	Shall	SCA-CCM-023
SCA97	Valid properties for the query operation shall at a minimum be the configure, readwrite, and readonly properties, and allocation properties that have an action value of "external" as referenced in the component's SPD.	3.1.3.1.5.5 .2.3	Test	Shall	SCA-CCM-025
SCA98	The query operation shall raise the CF UnknownProperties exception when one or more properties being requested are not known by the component.	3.1.3.1.5.5 .2.5	Test	Shall	
SCA99	The error number shall indicate an ErrorNumberType value (e.g., EDOM, EPERM, ERANGE).	3.1.3.1.6.3 .2	Test	Shall	
SCA100	The error number shall indicate an ErrorNumberType value (e.g., ECANCELED, EFAULT, EINPROGRESS).	3.1.3.1.6.3 .3	Test	Shall	
SCA101	The readonly identifier attribute shall contain the unique identifier for a resource instance.	3.1.3.1.6.4 .1	Test	Shall	

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SCA102	The stop operation shall disable all current operations and put the Resource in a non-operating condition.	3.1.3.1.6.5 .1.3	Test	Shall	SCA-CCM-025
SCA103	The stop operation shall raise the StopError exception if an error occurs while stopping the resource.	3.1.3.1.6.5 .1.5	Test	Shall	
SCA105	The start operation shall raise the StartError exception if an error occurs while starting the resource.	3.1.3.1.6.5 .2.5	Test	Shall	
SCA108	The error number shall indicate an ErrorNumberType value (e.g., NOTSET, EBADMSG, EINVAL, EMSGSIZE, ENOMEM).	3.1.3.1.7.3 .3	Test	Shall	
SCA109	The qualifiers may be used to identify, for example, specific subtypes of Resources created by a ResourceFactory.If no Resource exists for the given resourceId, the createResource operation shall create a Resource.	3.1.3.1.7.5 .1.3	Test	Shall	SCA-CCM-023
SCA110	The createResource operation shall assign the given resourceId to a new Resource and either set a reference count to one, when the Resource is initially created, or increment the reference count by one, when the Resource already exists.	3.1.3.1.7.5 .1.3	Test	Shall	
SCA111	The createResource operation shall return a reference to the created Resource or the existing Resource.	3.1.3.1.7.5 .1.4	Test	Shall	
SCA112	The createResource operation shall return a nil CORBA component reference when the operation is unable to create or find the Resource.	3.1.3.1.7.5 .1.4	Test	Shall	
SCA113	The createResource operation shall return a reference to the created Resource or the existing Resource.	3.1.3.1.7.5 .1.4	Test	Shall	SCA-CCM-028
SCA114	The createResource operation shall return a nil CORBA component reference when the operation is unable to create the Resource.	3.1.3.1.7.5 .1.4	Test	Shall	SCA-CCM-028

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SCA115	The createResource operation shall raise the CreateResourceFailure exception when it cannot create the Resource.	3.1.3.1.7.5 .1.5	Test	Shall	
SCA116	The releaseResource operation shall decrement the reference count for the specified resource, as indicated by the resourceId.	3.1.3.1.7.5 .2.3	Not Testable	Shall	
SCA117	The releaseResource operation shall make the Resource no longer available (i.e., it is released from the CORBA environment) when the Resource's reference count is zero.	3.1.3.1.7.5 .2.3	Test	Shall	
SCA118	The releaseResource operation shall raise the InvalidResourceId exception if an invalid resourceId is received.	3.1.3.1.7.5 .2.5	Test	Shall	
SCA119	The shutdown operation shall result in the ResourceFactory being unavailable to any subsequent calls to its object reference (i.e. it is released from the CORBA environment).	3.1.3.1.7.5 .3.3	Test	Shall	
SCA120	Framework Control Interfaces shall be implemented using the CF IDL presented in Appendix C.	3.1.3.2	Test	Shall	
SCA121	The readonly profile attribute shall contain either a profile element with a file reference to the SAD profile file or the XML for the SAD profile.	3.1.3.2.1.4 .1	Test	Shall	
SCA122	This readonly name attribute shall contain the name of the created Application.	3.1.3.2.1.4 .2	Test	Shall	
SCA123	The componentNamingContexts attribute shall contain the list of components' Naming Service Context within the Application for those components using CORBA Naming Service.	3.1.3.2.1.4 .3	Test	Shall	
SCA124	The componentProcessIds attribute shall contain the list of components' process IDs within the Application for components that are executing on a device.	3.1.3.2.1.4 .4	Test	Shall	

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SCA125	The componentDevices attribute shall contain a list of devices, which each component either uses, is loaded on or is executed on.	3.1.3.2.1.4.5	Test	Shall	
SCA126	The componentImplementations attribute shall contain the list of components' SPD implementation IDs within the Application for those components created.	3.1.3.2.1.4.6	Test	Shall	
SCA127	The Application shall delegate the implementation of the inherited Resource operations (runTest, start, stop, configure, and query) to the Application's Resource component (Assembly Controller) identified by the Application's SAD assemblycontroller element.	3.1.3.2.1.5	Test	Shall	
SCA128	The Application shall propagate exceptions raised by the Application's Assembly Controller's operations.	3.1.3.2.1.5	Test	Shall	SCA-CCM-025
SCA129	The initialize operation shall not be propagated to the Application's components or its Assembly Controller.	3.1.3.2.1.5	Test	Shall	SCA-CCM-025
SCA130	The initialize operation shall cause no action within an Application.	3.1.3.2.1.5	Test	Shall	SCA-CCM-028
SCA131	For each Application component not created by a ResourceFactory, the releaseObject operation shall release the component by utilizing the Resources's releaseObject operation.	3.1.3.2.1.6.1.3	Test	Shall	SCA-CCM-023
SCA132	If the component was created by a ResourceFactory, the releaseObject operation shall release the component by the ResourceFactory releaseResource operation.	3.1.3.2.1.6.1.3	Test	Shall	SCA-CCM-023
SCA133	The releaseObject operation shall shutdown a ResourceFactory when no more Resources are managed by the ResourceFactory.	3.1.3.2.1.6.1.3	Test	Shall	

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SCA134	For each allocated device capable of operation execution, the releaseObject operation shall terminate all processes / tasks of the Application's components utilizing the Device's terminate operation.	3.1.3.2.1.6 .1.3	Test	Shall	SCA-CCM-023
SCA135	For each allocated device capable of memory function, the releaseObject operation shall de-allocate the memory associated with Application's component instances utilizing the Device's unload operation.	3.1.3.2.1.6 .1.3	Test	Shall	SCA-CCM-023
SCA136	The releaseObject operation shall deallocate the Devices that are associated with the Application being released, based on the Application's Software Profile.	3.1.3.2.1.6 .1.3	Test	Shall	SCA-CCM-025
SCA137	The Application shall release all client component references to the Application components.	3.1.3.2.1.6 .1.3	Test	Shall	SCA-CCM-025
SCA138	The releaseObject operation shall disconnect Ports from other Ports that have been connected based upon the software profile.	3.1.3.2.1.6 .1.3	Test	Shall	SCA-CCM-024
SCA139	The releaseObject operation shall disconnect consumers and producers from a CORBA Event Service's event channel based upon the software profile.	3.1.3.2.1.6 .1.3	Test	Shall	
SCA140	For components (e.g., Resource, ResourceFactory) that are registered with Naming Service, the releaseObject operation shall unbind those components and destroy the associated naming contexts as necessary from the Naming Service.	3.1.3.2.1.6 .1.3	Test	Shall	
SCA141	The releaseObject operation for an application shall disconnect Ports first, then release the Resources and ResourceFactories, then call the terminate operation, and lastly call the unload operation on the devices.	3.1.3.2.1.6 .1.3	Test	Shall	

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SCA142	The releaseObject operation shall, upon successful Application release, write an ADMINISTRATIVE_EVENT log record.	3.1.3.2.1.6 .1.3	Demonstration	Shall	SCA-CCM-025
SCA143	The releaseObject operation shall, upon unsuccessful Application release, write a FAILURE_ALARM log record.	3.1.3.2.1.6 .1.3	Demonstration	Shall	SCA-CCM-025
SCA144	The releaseObject operation shall, upon successful Application release, send an event to the Outgoing Domain Management event channel with event data consisting of a DomainManagementObjectRemovedEventType.	3.1.3.2.1.6 .1.3	Test	Shall	
SCA145	The producerId shall be the identifier attribute of the released Application.	3.1.3.2.1.6 .1.3	Test	Shall	
SCA146	The sourceId shall be the identifier attribute of the released Application.	3.1.3.2.1.6 .1.3	Test	Shall	
SCA147	The sourceName shall be the name attribute of the released Application.	3.1.3.2.1.6 .1.3	Test	Shall	
SCA148	The sourceCategory shall be APPLICATION.	3.1.3.2.1.6 .1.3	Test	Shall	
SCA149	The releaseObject operation shall raise a ReleaseError exception when the releaseObject operation unsuccessfully releases the Application components due to internal processing errors.	3.1.3.2.1.6 .1.5	Test	Shall	SCA-CCM-024
SCA150	The getPort operation shall return object references only for input port names that match the port names that are in the Application SAD externalports element.	3.1.3.2.1.6 .2.4	Test	Shall	
SCA151	The getPort operation shall raise an UnknownPort exception if the port is invalid.	3.1.3.2.1.6 .2.5	Test	Shall	SCA-CCM-022
SCA152	The error number shall indicate an ErrorNumberType value (e.g., E2BIG, ENAMETOOLONG, ENFILE, ENODEV, ENOENT, ENOEXEC, ENOMEM, ENOTDIR, ENXIO, EPERM).	3.1.3.2.2.3 .2	Inspection/Analysis	Shall	

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SCA153	The readonly name attribute shall contain the type of Application that can be instantiated by the ApplicationFactory.	3.1.3.2.2.4.1	Test	Shall	SCA-CCM-025
SCA154	The readonly softwareProfile attribute shall contain either a profile element with a file reference to the SAD profile or the XML for the SAD profile.	3.1.3.2.2.4.2	Test	Shall	
SCA155	The readonly identifier attribute shall contain the unique identifier for an ApplicationFactory instance.	3.1.3.2.2.4.3	Test	Shall	
SCA156	The identifier shall be identical to the softwareassembly element id attribute of the ApplicationFactory's Software Assembly Descriptor file.	3.1.3.2.2.4.3	Test	Shall	SCA-CCM-028
SCA157	The create operation shall use the SAD SPD implementation element to locate candidate devices capable of loading and executing Application components.	3.1.3.2.2.5.1.3	Test	Shall	
SCA158	The create operation shall allocate (Device allocateCapacity) component capacity requirements against candidate devices to determine which candidate devices satisfy all SPD implementation criteria requirements and SAD partitioning requirements (e.g., components HostCollocation, etc.).	3.1.3.2.2.5.1.3	Demonstration	Shall	SCA-CCM-025
SCA159	The create operation shall only use Devices that have been granted successful capacity allocations for loading and executing Application components, or used for data processing.	3.1.3.2.2.5.1.3	Not Testable	Shall	SCA-CCM-025; SCA-CCM-022
SCA160	The create operation shall load the Application components (including all of the Application-dependent components) to the chosen device(s).	3.1.3.2.2.5.1.3	Test	Shall	

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SCA161	The create operation shall execute the application components (including all of the application-dependent components) as specified in the application's Software Assembly Descriptor (SAD) file.	3.1.3.2.2.5 .1.3	Test	Shall	
SCA162	The create operation shall use each component's SPD implementation code's stack size and priority elements, when specified, for the execute options parameters.	3.1.3.2.2.5 .1.3	Test	Shall	
SCA163	The create operation shall pass the mandatory execute parameters of a Naming Context IOR, Name Binding, and the identifier for the component in the form of CF Properties to the entry points of Resource components to be executed via a Device's execute operation.	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-025
SCA164	The execute parameter for the Naming Context IOR shall be inserted into a CF Properties type.	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-028
SCA165	The CF Properties ID element shall be set to "NAMING_CONTEXT_IOR" and the CF Properties value element set to the stringified IOR of a naming context to which the component will bind.	3.1.3.2.2.5 .1.3	Test	Shall	
SCA166	The create operation shall create any naming contexts that do not exist to which the component will bind to the Naming Context IOR.	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-024
SCA167	The structure of the naming context path shall be "/ DomainName / [optional naming context sequences]".	3.1.3.2.2.5 .1.3	Demonstration	Shall	
SCA168	The execute parameter of Name Binding shall be inserted into a CF Properties type.	3.1.3.2.2.5 .1.3	Inspection/Analysis	Shall	SCA-CCM-028
SCA169	The CF Properties ID element shall be set to "NAME_BINDING" and CF Properties value element set to a string in the format of "ComponentName_UniqueIdentifier".	3.1.3.2.2.5 .1.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA170	For the component identifier execute parameter, the create operation shall be inserted in a CF Properties type.	3.1.3.2.2.5 .1.3	Inspection/ Analysis	Shall	SCA-CCM-028
SCA171	The CF Properties ID element shall be set to "COMPONENT_IDENTIFIER" and the CF Properties value element to the string format of Component_Instantiation_Identifier: Application_Name.	3.1.3.2.2.5 .1.3	Test	Shall	
SCA172	The Application_Name field shall be identical to the create operation's input name parameter.	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-025
SCA173	The create operation shall pass the componentinstantiation element "execparam" properties that have values as parameters to execute operation.	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-024
SCA174	The create operation shall, in order, initialize Resources, then establish connections for Resources, and finally configure the Resources.	3.1.3.2.2.5 .1.3	Not Testable	Shall	SCA-CCM-027
SCA175	The create operation shall initialize an Application component provided the component implements the LifeCycle interface.	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-025
SCA176	The create operation shall configure an application's assemblycontroller component provided the assemblycontroller has configure readwrite or writeonly properties with values.	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-025
SCA177	The create operation shall use the union of the input initConfiguration properties of the create operation and the assemblycontroller's componentinstantiation writeable "configure" properties that have values.	3.1.3.2.2.5 .1.3	Not Testable	Shall	SCA-CCM-027
SCA178	The input initConfiguration parameter shall have precedence over the assemblycontroller's writeable "configure" property values.	3.1.3.2.2.5 .1.3	Not Testable	Shall	SCA-CCM-027

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA179	The create operation, when creating a component from a ResourceFactory, shall pass the componentinstantiation componentresourcefactoryref element "factoryparam" properties that have values as qualifiers parameters to the referenced ResourceFactory component's createResource operation.	3.1.3.2.2.5 .1.3	Test	Shall	
SCA180	The create operation shall pass, with invocation of each ResourceFactory createResource operation, the ResourceFactory configuration properties associated with that Resource as dictated by the SAD.	3.1.3.2.2.5 .1.3	Test	Shall	
SCA181	For connections established for a Log, the create operation shall create a unique producer log ID for each log producer.	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-023
SCA182	The create operation shall invoke the PropertySet configure operation once, and only once, per log producer (as described by the SAD usesport element) in order to set its unique PRODUCER_LOG_ID (see section 3.1.3.3.5.5.1.2 for details).	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-028
SCA183	For connections established for a CORBA Event Service's event channel, the create operation shall connect a COSEventComm PushConsumer or PushSupplier object to the event channel as specified in the SAD's domainfinder element.	3.1.3.2.2.5 .1.3	Inspection/ Analysis	Shall	
SCA184	If the event channel does not exist, the create operation shall create the event channel.	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-023
SCA185	If the Application is successfully created, the create operation shall return an Application component reference for the created Application.	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-023

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA186	The create operation shall, upon successful Application creation, write an ADMINISTRATIVE_EVENT log record.	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-025
SCA187	The create operation shall, upon unsuccessful Application creation, write a FAILURE_ALARM log record.	3.1.3.2.2.5 .1.3	Test	Shall	SCA-CCM-025
SCA188	For connections established for a Log, the create operation shall create a unique producer log ID one time for each log producer.	3.1.3.2.2.5 .1.3	Test	Shall	
SCA189	The create operation shall invoke the PropertySet configure operation one time per log producer (as described by the SAD usesport element) in order to set its unique PRODUCER_LOG_ID (see section 3.1.2.3.1 for details).	3.1.3.2.2.5 .1.3	Test	Shall	
SCA190	The create operation shall, upon successful Application creation, send an event to the Outgoing Domain Management event channel with event data consisting of a DomainManagementObjectAdded EventType.	3.1.3.2.2.5 .1.3	Test	Shall	
SCA191	The producerId shall be the identifier attribute of the ApplicationFactory.	3.1.3.2.2.5 .1.3	Test	Shall	
SCA192	The sourceId shall be the identifier attribute of the created Application.	3.1.3.2.2.5 .1.3	Test	Shall	
SCA193	The sourceName shall be the name attribute of the created Application.	3.1.3.2.2.5 .1.3	Test	Shall	
SCA194	The sourceIOR shall be the Application component reference for the created Application.	3.1.3.2.2.5 .1.3	Test	Shall	
SCA195	The sourceCategory shall be APPLICATION.	3.1.3.2.2.5 .1.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA196	The create operation shall raise the CreateApplicationRequestError exception when the parameter CF DeviceAssignmentSequence contains one (1) or more invalid Application component to device assignment(s).	3.1.3.2.2.5 .1.5	Test	Shall	SCA-CCM-024
SCA197	The create operation shall raise the CreateApplicationError exception when the create request is valid but the Application cannot be successfully instantiated due to internal processing error(s).	3.1.3.2.2.5 .1.5	Test	Shall	SCA-CCM-022
SCA198	The create operation shall raise the InvalidInitConfiguration exception when the input initConfiguration parameter is invalid.	3.1.3.2.2.5 .1.5	Test	Shall	SCA-CCM-022
SCA199	The InvalidInitConfiguration invalidProperties shall identify the property that is invalid.	3.1.3.2.2.5 .1.5	Test	Shall	SCA-CCM-022
SCA200	The error number shall indicate an ErrorNumberType value (e.g., EINVAL, ENAMETOOLONG, ENOENT, ENOMEM, ENOSPC, ENOTDIR, ENXIO).	3.1.3.2.3.3 .1	Test	Shall	
SCA201	The error number shall indicate an ErrorNumberType value.	3.1.3.2.3.3 .7	Test	Shall	
SCA202	The error number shall indicate an ErrorNumberType value.	3.1.3.2.3.3 .8	Test	Shall	
SCA203	The error number shall indicate an ErrorNumberType value.	3.1.3.2.3.3 .9	Test	Shall	
SCA204	The readonly deviceManagers attribute shall contain a list of registered DeviceManagers that have registered with the DomainManager.	3.1.3.2.3.4 .1	Test	Shall	
SCA205	The DomainManager shall write an ADMINISTRATIVE_EVENT log to a DomainManager's Log, when the deviceManagers attribute is obtained by a client.	3.1.3.2.3.4 .1	Test	Shall	
SCA206	The readonly applications attribute shall contain the list of Applications that have been instantiated.	3.1.3.2.3.4 .2	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA207	The DomainManager shall write an ADMINISTRATIVE_EVENT log record to a DomainManager's Log, when the application's attribute is obtained by a client.	3.1.3.2.3.4.2	Test	Shall	
SCA208	The readonly applicationFactories attribute shall contain a list with one ApplicationFactory per application (SAD file and associated files) successfully installed (i.e. no exception raised).	3.1.3.2.3.4.3	Test	Shall	
SCA209	The DomainManager shall write an ADMINISTRATIVE_EVENT log record to a DomainManager's Log, when the applicationFactories attribute is obtained by a client.	3.1.3.2.3.4.3	Test	Shall	
SCA210	The readonly fileMgr attribute shall contain the DomainManager's FileManager.	3.1.3.2.3.4.4	Test	Shall	
SCA211	The DomainManager shall write an ADMINISTRATIVE_EVENT log record to a DomainManager's Log, when the fileMgr attribute is obtained by a client.	3.1.3.2.3.4.4	Test	Shall	
SCA212	The readonly domainManagerProfile attribute shall contain either a profile element with a file reference to the DomainManager Configuration Descriptor (DMD) profile or the XML for the DomainManager's (DMD) profile.	3.1.3.2.3.4.5	Test	Shall	
SCA213	The readonly identifier attribute shall contain a unique identifier for a DomainManager instance.	3.1.3.2.3.4.6	Test	Shall	
SCA214	The identifier shall be identical to the domainmanagerconfiguration element id attribute of the DomainManager's Descriptor (DMD) file.	3.1.3.2.3.4.6	Test	Shall	
SCA215	During component construction the DomainManager shall register itself with the CORBA Naming Service.	3.1.3.2.3.5	Test	Shall	SCA-CCM-025

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA216	During Naming Service registration the DomainManager shall create a "naming context" using "/DomainName" as its name.ID component and "" (Null string) as its name.kind component, then create a "name binding" to the "/DomainName" naming context using "/DomainManager" as its name.ID component, "" (Null string) as its name.kind component, and the DomainManager's object reference. (See also 3.1.3.2.2.5.1.3)	3.1.3.2.3.5	Test	Shall	SCA-CCM-023
SCA217	The Logs utilized by the DomainManager implementation shall be defined in the DMD.	3.1.3.2.3.5	Test	Shall	SCA-CCM-023
SCA218	Once a service specified in the DMD is successfully registered with the DomainManager (via registerDeviceManager or registerService operations), the DomainManager shall begin to use the service (e.g., Log).	3.1.3.2.3.5	Test	Shall	SCA-CCM-023
SCA219	The DomainManager shall create its own FileManager component that consists of all registered DeviceManager's FileSystems.	3.1.3.2.3.5	Test	Shall	
SCA220	The DomainManager shall restore ApplicationFactories after startup for applications that were previously installed by the DomainManager installApplication operation.	3.1.3.2.3.5	Test	Shall	SCA-CCM-026
SCA221	The DomainManager shall add the restored ApplicationFactories to the DomainManager's applicationFactories attribute.	3.1.3.2.3.5	Test	Shall	
SCA222	The DomainManager shall create the Incoming Domain Management and Outgoing Domain Management event channels.	3.1.3.2.3.5	Demonstration	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA223	The registerDeviceManager operation shall add the input deviceMgr to the DomainManager's deviceManagers attribute, if it does not already exist.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA224	The registerDeviceManager operation shall add the input deviceMgr's registeredDevices and each registeredDevice's attributes (e.g., identifier, softwareProfile's allocation properties, etc.) to the DomainManager.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA225	The registerDeviceManager operation shall add the input deviceMgr's registeredServices and each registeredService's names to the DomainManager.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA226	The registerDeviceManager operation shall perform the connections specified in the connections element of the deviceMgr's Device Configuration Descriptor (DCD) file.	3.1.3.2.3.6 .1.3	Inspection/ Analysis	Shall	
SCA227	If the DeviceManager's DCD describes a connection for a service that has not been registered with the DomainManager, the registerDeviceManager operation shall establish any pending connection when the service registers with the DomainManager by the registerDeviceManager operation	3.1.3.2.3.6 .1.3	Demonstration	Shall	SCA-CCM-023
SCA228	For connections established for a CORBA Event Service's event channel, the registerDeviceManager operation shall connect a CosEventComm PushConsumer or PushSupplier object to the event channel as specified in the DCD's domainfinder element.	3.1.3.2.3.6 .1.3	Test	Shall	SCA-CCM-023
SCA229	If the event channel does not exist, the registerDeviceManager operation shall create the event channel.	3.1.3.2.3.6 .1.3	Test	Shall	SCA-CCM-023

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA230	The registerDeviceManager operation shall obtain all the Software profiles from the registering DeviceManager's FileSystems.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA231	The registerDeviceManager operation shall mount the DeviceManager's FileSystem to the DomainManager's FileManager.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA232	The mounted FileSystem name shall have the format, "/DomainName/HostName", where DomainName is the name of the domain and HostName is the input deviceMgr's label attribute.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA233	The registerDeviceManager operation shall, upon unsuccessful DeviceManager registration, write a FAILURE_ALARM log record to a DomainManager's Log.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA234	The registerDeviceManager operation shall, upon successful DeviceManager registration, send an event to the Outgoing Domain Management event channel with event data consisting of a DomainManagementObjectAdded EventType.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA235	The producerId shall be the identifier attribute of the DomainManager.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA236	The sourceId shall be the identifier attribute of the registered DeviceManager.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA237	The sourceName shall be the label attribute of the registered DeviceManager.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA238	The sourceIOR shall be the registered DeviceManager object reference.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA239	The sourceCategory shall be DEVICE_MANAGER.	3.1.3.2.3.6 .1.3	Test	Shall	
SCA240	The registerDeviceManager operation shall raise the CF InvalidObjectReference exception when the input parameter deviceMgr contains an invalid reference to a DeviceManager interface.	3.1.3.2.3.6 .1.5	Test	Shall	SCA-CCM-025;SCA-CCM-022

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA241	The registerDeviceManager operation shall raise the RegisterError exception when an internal error exists which causes an unsuccessful registration.	3.1.3.2.3.6 .1.5	Test	Shall	SCA-CCM-022
SCA242	The registerDevice operation shall add the registeringDevice and the registeringDevice's attributes (e.g., identifier, softwareProfile's allocation properties, etc.) to the DomainManager, if it does not already exist.	3.1.3.2.3.6 .2.3	Test	Shall	
SCA243	When the registering Device's parent DeviceManager's DCD describes service connections for the registering Device, the registerDevice operation shall establish the connections.	3.1.3.2.3.6 .2.3	Test	Shall	SCA-CCM-023
SCA244	The registerDevice operation shall, upon successful device registration, write an ADMINISTRATIVE_EVENT log record to a DomainManager's Log, to indicate that the device has successfully registered with the DomainManager.	3.1.3.2.3.6 .2.3	Test	Shall	SCA-CCM-025
SCA245	Upon unsuccessful device registration, the registerDevice operation shall write a FAILURE_ALARM log record to a DomainManager's Log, when the InvalidProfile exception is raised to indicate that the registeringDevice has an invalid profile.	3.1.3.2.3.6 .2.3	Test	Shall	SCA-CCM-023;SCA-CCM-022
SCA246	Upon unsuccessful device registration, the registerDevice operation shall write a FAILURE_ALARM log record to a DomainManager's Log, indicating that the device could not register because the DeviceManager is not registered with the DomainManager.	3.1.3.2.3.6 .2.3	Test	Shall	SCA-CCM-023;SCA-CCM-022
SCA247	Upon unsuccessful device registration, the registerDevice operation shall write a FAILURE_ALARM log record to a DomainManager's Log, because of an invalid reference input parameter.	3.1.3.2.3.6 .2.3	Test	Shall	SCA-CCM-023; SCA-CCM-022

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA248	Upon unsuccessful device registration, the registerDevice operation shall write a FAILURE_ALARM log record to a DomainManager's Log, because of an internal registration error.	3.1.3.2.3.6 .2.3	Test	Shall	SCA-CCM-023; SCA-CCM-022
SCA249	The registerDevice operation shall, upon successful Device registration, send an event to the Outgoing Domain Management event channel with event data consisting of a DomainManagementObjectAdded EventType.	3.1.3.2.3.6 .2.3	Test	Shall	
SCA250	The producerId shall be the identifier attribute of the DomainManager.	3.1.3.2.3.6 .2.3	Test	Shall	
SCA251	The sourceId shall be the identifier attribute of the registered Device.	3.1.3.2.3.6 .2.3	Test	Shall	
SCA252	The sourceName shall be the label attribute of the registered Device.	3.1.3.2.3.6 .2.3	Test	Shall	
SCA253	The sourceIOR shall be the registered Device object reference.	3.1.3.2.3.6 .2.3	Test	Shall	
SCA254	The sourceCategory shall be DEVICE.	3.1.3.2.3.6 .2.3	Test	Shall	
SCA255	The registerDevice operation shall raise the CF InvalidProfile exception when:1. The Device's SPD file and the SPD's referenced files do not exist or cannot be processed due to the file not being compliant with XML syntax, or2. The Device's SPD does not reference allocation properties	3.1.3.2.3.6 .2.5	Test	Shall	SCA-CCM-030
SCA256	The registerDevice operation shall raise a DeviceManagerNotRegistered exception when the input registeredDeviceMgr (not nil reference) is not registered with the DomainManager.	3.1.3.2.3.6 .2.5	Test	Shall	
SCA257	The registerDevice operation shall raise the CF InvalidObjectReference exception when input parameters registeringDevice or registeredDeviceMgr contains an invalid reference.	3.1.3.2.3.6 .2.5	Test	Shall	SCA-CCM-022

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA258	The registerDevice operation shall raise the RegisterError exception when an internal error exists which causes an unsuccessful registration.	3.1.3.2.3.6 .2.5	Test	Shall	SCA-CCM-022
SCA259	The installApplication operation shall verify the application's SAD file exists in the DomainManager's FileManager and all the files the application is dependent on are also resident.	3.1.3.2.3.6 .3.3	Test	Shall	SCA-CCM-024
SCA260	The installApplication operation shall write an ADMINISTRATIVE_EVENT log record to a DomainManager's Log, upon successful Application installation.	3.1.3.2.3.6 .3.3	Test	Shall	SCA-CCM-022
SCA261	The installApplication operation shall, upon unsuccessful application installation, write a FAILURE_ALARM log record to a DomainManager's Log.	3.1.3.2.3.6 .3.3	Test	Shall	SCA-CCM-022
SCA262	The installApplication operation shall, upon successful application installation, send an event to the Outgoing Domain Management event channel with event data consisting of a DomainManagementObjectAdded EventType.	3.1.3.2.3.6 .3.3	Test	Shall	SCA-CCM-022
SCA263	The producerId shall be the identifier attribute of the DomainManager.	3.1.3.2.3.6 .3.3	Test	Shall	
SCA264	The sourceId shall be the identifier attribute of the installed ApplicationFactory.	3.1.3.2.3.6 .3.3	Test	Shall	
SCA265	The sourceName shall be the name attribute of the installed ApplicationFactory.	3.1.3.2.3.6 .3.3	Test	Shall	
SCA266	The sourceIOR shall be the installed ApplicationFactory object reference.	3.1.3.2.3.6 .3.3	Test	Shall	
SCA267	The sourceCategory shall be APPLICATION_FACTORY.	3.1.3.2.3.6 .3.3	Test	Shall	
SCA268	The installApplication operation shall raise the ApplicationInstallationError exception when the installation of the Application file(s) was not successfully completed.	3.1.3.2.3.6 .3.5	Test	Shall	SCA-CCM-022

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA269	The installApplication operation shall raise the InvalidFileName exception when the input SAD file or any referenced file name does not exist in the file system as defined in the absolute path of the input profileFileName.	3.1.3.2.3.6 .3.5	Test	Shall	
SCA270	When the InvalidFileName exception occurs, the installApplication operation shall log a FAILURE_ALARM log record to a DomainManager's Log with a message consisting of "installApplication::invalid file is xxx", where "xxx" is the input or referenced file name that is bad.	3.1.3.2.3.6 .3.5	Test	Shall	SCA-CCM-023
SCA271	The installApplication operation shall raise the CF InvalidProfile exception when the input SAD file or any referenced file is not compliant with XML DTDs defined in Appendix D or referenced property definitions are missing.	3.1.3.2.3.6 .3.5	Test	Shall	
SCA272	When the CF InvalidProfile exception occurs, the installApplication operation shall log a FAILURE_ALARM log record to a DomainManager's Log with a message consisting of "installApplication::invalid Profile is yyy," where "yyy" is the input or referenced file name that is bad along with the element or position within the profile that is bad.	3.1.3.2.3.6 .3.5	Test	Shall	SCA-CCM-023
SCA273	The unregisterDeviceManager operation shall unregister a DeviceManager component from the DomainManager.	3.1.3.2.3.6 .4.3	Test	Shall	
SCA274	The unregisterDeviceManager operation shall release all device(s) and service(s) associated with the DeviceManager that is being unregistered.	3.1.3.2.3.6 .4.3	Test	Shall	SCA-CCM-025

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA275	The unregisterDeviceManager operation shall disconnect consumers and producers (e.g., Devices, Log, DeviceManager, etc.) from a CORBA Event Service event channel based upon the software profile.	3.1.3.2.3.6 .4.3	Test	Shall	SCA-CCM-025
SCA276	The unregisterDeviceManager operation shall unmount all DeviceManager's FileSystems from its File Manager.	3.1.3.2.3.6 .4.3	Test	Shall	
SCA277	The unregisterDeviceManager operation shall, upon the successful unregistration of a DeviceManager, write an ADMINISTRATIVE_EVENT log record to a DomainManager's Log.	3.1.3.2.3.6 .4.3	Test	Shall	SCA-CCM-022
SCA278	The unregisterDeviceManager operation shall, upon unsuccessful unregistration of a DeviceManager, write a FAILURE_ALARM log record to a DomainManager's Log.	3.1.3.2.3.6 .4.3	Test	Shall	SCA-CCM-022
SCA279	The unregisterDeviceManager operation shall, upon successful unregistration, send an event to the Outgoing Domain Management event channel with event data consisting of a DomainManagementObjectRemovedEventType.	3.1.3.2.3.6 .4.3	Test	Shall	SCA-CCM-022
SCA280	The producerId shall be the identifier attribute of the DomainManager.	3.1.3.2.3.6 .4.3	Test	Shall	
SCA281	The sourceId shall be the identifier attribute of the unregistered DeviceManager.	3.1.3.2.3.6 .4.3	Test	Shall	
SCA282	The sourceName shall be the label attribute of the unregistered DeviceManager.	3.1.3.2.3.6 .4.3	Test	Shall	
SCA283	The sourceCategory shall be DEVICE_MANAGER.	3.1.3.2.3.6 .4.3	Test	Shall	
SCA284	The unregisterDeviceManager operation shall raise the CF InvalidObjectReference when the input parameter DeviceManager contains an invalid reference to a DeviceManager interface.	3.1.3.2.3.6 .4.5	Test	Shall	SCA-CCM-022

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA285	The unregisterDeviceManager operation shall raise the UnregisterError exception when an internal error exists which causes an unsuccessful unregistration.	3.1.3.2.3.6 .4.5	Test	Shall	SCA-CCM-022
SCA286	The unregisterDevice operation shall remove a device entry from the DomainManager.	3.1.3.2.3.6 .5.3	Test	Shall	
SCA287	The unregisterDevice operation shall release (client-side CORBA release) the unregisteringDevice from the Domain Manager.	3.1.3.2.3.6 .5.3	Test	Shall	SCA-CCM-030
SCA288	The unregisterDevice operation shall disconnect the Device's consumers and producers from a CORBA Event Service event channel based upon the software profile.	3.1.3.2.3.6 .5.3	Test	Shall	SCA-CCM-025
SCA289	The unregisterDevice operation shall, upon the successful unregistration of a Device, write an ADMINISTRATIVE_EVENT log record to a DomainManager's Log.	3.1.3.2.3.6 .5.3	Test	Shall	SCA-CCM-022
SCA290	The unregisterDevice operation shall, upon unsuccessful unregistration of a Device, write a FAILURE_ALARM log record to a DomainManager's Log.	3.1.3.2.3.6 .5.3	Test	Shall	SCA-CCM-022
SCA291	The unregisterDevice operation shall, upon successful Device unregistration, send an event to the Outgoing Domain Management event channel with event data consisting of a DomainManagementObjectRemovedEventType.	3.1.3.2.3.6 .5.3	Test	Shall	SCA-CCM-022
SCA292	The producerId shall be the identifier attribute of the DomainManager.	3.1.3.2.3.6 .5.3	Test	Shall	
SCA293	The sourceId shall be the identifier attribute of the unregistered Device.	3.1.3.2.3.6 .5.3	Test	Shall	
SCA294	The sourceName shall be the label attribute of the unregistered Device.	3.1.3.2.3.6 .5.3	Test	Shall	
SCA295	The sourceCategory shall be DEVICE.	3.1.3.2.3.6 .5.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA296	The unregisterDevice operation shall raise the CF InvalidObjectReference exception when the input parameter contains an invalid reference to a Device interface.	3.1.3.2.3.6 .5.5	Test	Shall	SCA-CCM-022
SCA297	The unregisterDevice operation shall raise the UnregisterError exception when an internal error exists which causes an unsuccessful unregistration.	3.1.3.2.3.6 .5.5	Test	Shall	SCA-CCM-022
SCA298	The uninstallApplication operation shall remove all files associated with the Application.	3.1.3.2.3.6 .6.3	Test	Shall	
SCA299	The uninstallApplication operation shall make the ApplicationFactory unavailable from the DomainManager (i.e. its services no longer provided for the Application).	3.1.3.2.3.6 .6.3	Test	Shall	
SCA300	The uninstallApplication operation shall, upon successful uninstall of an Application, write an ADMINISTRATIVE_EVENT log record to a DomainManager's Log.	3.1.3.2.3.6 .6.3	Test	Shall	SCA-CCM-022
SCA301	The uninstallApplication operation shall, upon unsuccessful uninstall of an Application, write a FAILURE_ALARM log record to a DomainManager's Log.	3.1.3.2.3.6 .6.3	Test	Shall	SCA-CCM-028; SCA-CCM-022
SCA302	The uninstallApplication operation shall, upon unsuccessful uninstall of an Application, log a FAILURE_ALARM log record to a DomainManager's Log.	3.1.3.2.3.6 .6.3	Test	Shall	
SCA303	The uninstallApplication operation shall, upon successful uninstall of an application, send an event to the Outgoing Domain Management event channel with event data consisting of a DomainManagementObjectRemovedEventType.	3.1.3.2.3.6 .6.3	Test	Shall	SCA-CCM-022
SCA304	The producerId shall be the identifier attribute of the DomainManager.	3.1.3.2.3.6 .6.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA305	The sourceId shall be the identifier attribute of the uninstalled ApplicationFactory.	3.1.3.2.3.6 .6.3	Test	Shall	
SCA306	The sourceName shall be the name attribute of the uninstalled ApplicationFactory.	3.1.3.2.3.6 .6.3	Test	Shall	
SCA307	The sourceCategory shall be APPLICATION_FACTORY.	3.1.3.2.3.6 .6.3	Test	Shall	
SCA308	The uninstallApplication operation shall raise the InvalidIdentifier exception when the ApplicationId is invalid.	3.1.3.2.3.6 .6.5	Test	Shall	SCA-CCM-022
SCA309	The uninstallApplication operation shall raise the ApplicationUninstallationError exception when an internal error causes unsuccessful uninstall of the application.	3.1.3.2.3.6 .6.5	Test	Shall	SCA-CCM-022
SCA310	The registerService operation shall verify the input registeringService and registeredDeviceMgr are valid object references.	3.1.3.2.3.6 .7.3	Test	Shall	
SCA311	The registerService operation shall verify the input registeredDeviceMgr has been previously registered with the DomainManager.	3.1.3.2.3.6 .7.3	Test	Shall	
SCA312	The registerService operation shall add the registeringService's object reference and the registeringService's name to the DomainManager, if the name for the type of service being registered does not exist within the DomainManager.	3.1.3.2.3.6 .7.3	Test	Shall	
SCA313	However, if the name of the registering service is a duplicate of a registered service of the same type, then the new service shall not be registered with the DomainManager.	3.1.3.2.3.6 .7.3	Test	Shall	SCA-CCM-023
SCA314	The registerService operation shall associate the input registeringService parameter with the input registeredDeviceMgr parameter in the DomainManager's, when the registeredDeviceMgr parameter indicates a DeviceManager registered with the DomainManager.	3.1.3.2.3.6 .7.3	Inspection/ Analysis	Shall	SCA-CCM-024

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA315	The registerService operation shall, upon successful service registration, establish any pending connection requests for the registeringService.	3.1.3.2.3.6 .7.3	Test	Shall	SCA-CCM-022
SCA316	The registerService operation shall, upon successful service registration, write an ADMINISTRATIVE_EVENT log record to a DomainManager's Log.	3.1.3.2.3.6 .7.3	Test	Shall	SCA-CCM-022
SCA317	The registerService operation shall, upon unsuccessful service registration, write a FAILURE_ALARM log record to a DomainManager's Log.	3.1.3.2.3.6 .7.3	Test	Shall	SCA-CCM-022
SCA318	The registerService operation shall, upon successful service registration, send an event to the Outgoing Domain Management event channel with event data consisting of a DomainManagementObjectAdded EventType.	3.1.3.2.3.6 .7.3	Test	Shall	SCA-CCM-022
SCA319	The producerId shall be the identifier attribute of the DomainManager.	3.1.3.2.3.6 .7.3	Test	Shall	
SCA320	The sourceId shall be the identifier attribute from the componentinstantiation element associated with the registered service.	3.1.3.2.3.6 .7.3	Test	Shall	
SCA321	The sourceName shall be the input name parameter for the registering service.	3.1.3.2.3.6 .7.3	Test	Shall	
SCA322	The sourceIOR shall be the registered service object reference.	3.1.3.2.3.6 .7.3	Test	Shall	
SCA323	The sourceCategory shall be SERVICE.	3.1.3.2.3.6 .7.3	Test	Shall	
SCA324	The registerService operation shall raise a DeviceManagerNotRegistered exception when the input registeredDeviceMgr parameter is not a nil reference and is not registered with the DomainManager.	3.1.3.2.3.6 .7.5	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA325	The registerService operation shall raise the CF InvalidObjectReference exception when input parameters registeringService or registeredDeviceMgr contains an invalid reference.	3.1.3.2.3.6 .7.5	Test	Shall	
SCA326	The registerService operation shall raise the RegisterError exception when an internal error exists which causes an unsuccessful registration.	3.1.3.2.3.6 .7.5	Test	Shall	SCA-CCM-022
SCA327	The unregisterService operation shall remove the unregisteringService entry specified by the input name parameter from the DomainManager.	3.1.3.2.3.6 .8.3	Test	Shall	
SCA328	The unregisterService operation shall release (client-side CORBA release) the unregisteringService from the DomainManager.	3.1.3.2.3.6 .8.3	Test	Shall	
SCA329	The unregisterService operation shall, upon the successful unregistration of a Service, write an ADMINISTRATIVE_EVENT log record to a DomainManager's Log.	3.1.3.2.3.6 .8.3	Test	Shall	SCA-CCM-022
SCA330	The unregisterService operation shall, upon unsuccessful unregistration of a Service, write a FAILURE_ALARM log record to a DomainManager's Log.	3.1.3.2.3.6 .8.3	Test	Shall	SCA-CCM-022
SCA331	The unregisterService operation shall, upon successful service unregistration, send an event to the Outgoing Domain Management event channel with event data consisting of a DomainManagementObjectRemovedEventType.	3.1.3.2.3.6 .8.3	Test	Shall	SCA-CCM-022
SCA332	The producerId shall be the identifier attribute of the DomainManager.	3.1.3.2.3.6 .8.3	Test	Shall	
SCA333	The sourceId shall be the ID attribute from the componentinstantiation element associated with the unregistered service.	3.1.3.2.3.6 .8.3	Test	Shall	
SCA334	The sourceName shall be the input name parameter for the unregistering service.	3.1.3.2.3.6 .8.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA335	The sourceCategory shall be SERVICE.	3.1.3.2.3.6.8.3	Test	Shall	
SCA336	The unregisterService operation shall raise the CF InvalidObjectReference exception when the input parameter contains an invalid reference to a Service interface.	3.1.3.2.3.6.8.5	Test	Shall	
SCA337	The unregisterService operation shall raise the UnregisterError exception when an internal error exists which causes an unsuccessful unregistration.	3.1.3.2.3.6.8.5	Test	Shall	SCA-CCM-022
SCA338	The registerWithEventChannel operation shall connect the input registeringObject to an event channel as specified by the input eventChannelName.	3.1.3.2.3.6.9.3	Inspection/Analysis	Shall	
SCA339	The registerWithEventChannel operation shall raise the CF InvalidObjectReference exception when the input registeringObject parameter contains an invalid reference to a CosEventComm PushConsumer interface.	3.1.3.2.3.6.9.5	Test	Shall	
SCA340	The registerWithEventChannel operation shall raise the InvalidEventChannelName exception when the input eventChannelName parameter contains an invalid event channel name (e.g, "ODM_Channel").	3.1.3.2.3.6.9.5	Test	Shall	SCA-CCM-022
SCA341	The registerWithEventChannel operation shall raise AlreadyConnected exception when the input parameter contains a connection to the event channel for the input registeringId parameter.	3.1.3.2.3.6.9.5	Test	Shall	
SCA342	The unregisterFromEventChannel operation shall disconnect a registered component from the event channel as identified by the input parameters.	3.1.3.2.3.6.10.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA343	The unregisterFromEventChannel operation shall raise the InvalidEventChannelName exception when the input eventChannelName parameter contains an invalid reference to an event channel (e.g., "ODM_Channel").	3.1.3.2.3.6 .10.5	Test	Shall	SCA-CCM-022
SCA344	The unregisterFromEventChannel operation shall raise the NotConnected exception when the input parameter unregisteringId parameter is not connected to specified input event channel.	3.1.3.2.3.6 .10.5	Test	Shall	
SCA345	The readonly usageState attribute shall contain the Device's usage state (IDLE, ACTIVE, or BUSY, see Figure 3-21).	3.1.3.2.4.4 .1	Test	Shall	
SCA381	Whenever the usageState attribute changes, the Device shall send an event to the Incoming Domain Management event channel with event data consisting of a StateChangeEvent type.	3.1.3.2.4.4 .1	Test	Shall	
SCA382	The producerId field shall be the identifier attribute of the Device.	3.1.3.2.4.4 .1	Test	Shall	
SCA383	The sourceId field shall be the identifier attribute of the Device.	3.1.3.2.4.4 .1	Test	Shall	
SCA384	The stateChangeCategory field shall be USAGE_STATE_EVENT.	3.1.3.2.4.4 .1	Test	Shall	
SCA385	The stateChangeFrom and stateChangeTo fields shall reflect the usageState attribute value before and after the state change, respectively.	3.1.3.2.4.4 .1	Test	Shall	
SCA386	The adminState attribute shall contain the device's admin state value.	3.1.3.2.4.4 .2	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA387	The adminState attribute shall only allow the setting of LOCKED and UNLOCKED values, where setting "LOCKED" is only effective when the adminState attribute value is UNLOCKED, and setting "UNLOCKED" is only effective when the adminState attribute value is LOCKED or SHUTTING_DOWN.	3.1.3.2.4.4 .2	Test	Shall	
SCA388	The adminState attribute, upon being commanded to be LOCKED, shall transition from the UNLOCKED to the SHUTTING_DOWN state and set the adminState to LOCKED for its entire aggregation of Devices (if it has any).	3.1.3.2.4.4 .2	Test	Shall	
SCA389	The adminState shall then transition to the LOCKED state when the Device's usageState is IDLE and its entire aggregation of Devices are LOCKED.	3.1.3.2.4.4 .2	Test	Shall	
SCA390	Whenever the adminState attribute changes, the Device shall send an event to the Incoming Domain Management event channel with event data consisting of a StateChangeEvent.	3.1.3.2.4.4 .2	Test	Shall	
SCA391	The producerId field shall be the identifier attribute of the Device.	3.1.3.2.4.4 .2	Test	Shall	
SCA392	The sourceId field shall be the identifier attribute of the Device.	3.1.3.2.4.4 .2	Test	Shall	
SCA393	The stateChangeCategory field shall be ADMINISTRATIVE_STATE_EVENT.	3.1.3.2.4.4 .2	Test	Shall	
SCA394	The stateChangeFrom and stateChangeTo fields shall reflect the adminState attribute value before and after the state change, respectively.	3.1.3.2.4.4 .2	Test	Shall	
SCA395	The readonly operationalState attribute shall contain the device's operational state (ENABLED or DISABLED).	3.1.3.2.4.4 .3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA396	Whenever the operationalState attribute changes, the Device shall send an event to the Incoming Domain Management event channel with event data consisting of a StateChangeEvent type.	3.1.3.2.4.4.3	Test	Shall	
SCA397	The producerId field shall be the identifier attribute of the Device.	3.1.3.2.4.4.3	Test	Shall	
SCA398	The sourceId field shall be the identifier attribute of the Device.	3.1.3.2.4.4.3	Test	Shall	
SCA399	The stateChangeCategory field shall be OPERATIONAL_STATE_EVENT.	3.1.3.2.4.4.3	Test	Shall	
SCA400	The stateChangeFrom and stateChangeTo fields shall reflect the operationalState attribute value before and after the state change, respectively.	3.1.3.2.4.4.3	Test	Shall	
SCA401	The readonly softwareProfile attribute shall contain either a profile DTD element with a file reference to the SPD profile file or the XML for the SPD profile.	3.1.3.2.4.4.4	Test	Shall	
SCA403	The readonly label attribute shall contain the Device's label.	3.1.3.2.4.4.5	Test	Shall	
SCA404	The readonly compositeDevice attribute shall contain the object reference of the aggregateDevice, which this Device is associated with or a nil CORBA object reference if no association exists.	3.1.3.2.4.4.6	Test	Shall	
SCA405	The allocateCapacity operation shall reduce the current capacities of the Device based upon the input capacities parameter, when the Device's adminState is UNLOCKED, Device's operationalState is ENABLED, and Device's usageState is not BUSY.	3.1.3.2.4.5.1.3	Test	Shall	
SCA406	The allocateCapacity operation shall set the Device's usageState attribute to BUSY, when the Device determines that it is not possible to allocate any further capacity.	3.1.3.2.4.5.1.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA407	The allocateCapacity operation shall set the usageState attribute to ACTIVE, when capacity is being used and any capacity is still available for allocation (reference Figure 3_21).	3.1.3.2.4.5 .1.3	Test	Shall	
SCA408	The allocateCapacity operation shall return "True", if the capacities have been allocated, or "False", if not allocated.	3.1.3.2.4.5 .1.4	Test	Shall	
SCA409	The allocateCapacity operation shall raise the InvalidCapacity exception, when the capacities are invalid or the capacity values are the wrong type or ID.	3.1.3.2.4.5 .1.5	Test	Shall	
SCA410	The allocateCapacity operation shall raise the InvalidState exception, when the Device's adminState is not UNLOCKED or operationalState is DISABLED.	3.1.3.2.4.5 .1.5	Test	Shall	
SCA411	The deallocateCapacity operation shall adjust the current capacities of the Device based upon the input capacities parameter.	3.1.3.2.4.5 .2.3	Test	Shall	
SCA412	The deallocateCapacity operation shall set the usageState attribute to ACTIVE when, after adjusting capacities, any of the Device's capacities are still being used.	3.1.3.2.4.5 .2.3	Test	Shall	
SCA413	The deallocateCapacity operation shall set the usageState attribute to IDLE when, after adjusting capacities, none of the Device's capacities are still being used.	3.1.3.2.4.5 .2.3	Test	Shall	
SCA414	The deallocateCapacity operation shall set the adminState attribute to LOCKED as specified in 3.1.3.2.4.4.2.	3.1.3.2.4.5 .2.3	Test	Shall	
SCA415	The deallocateCapacity operation shall raise the InvalidCapacity exception, when the capacity ID is invalid or the capacity value is the wrong type.	3.1.3.2.4.5 .2.5	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA417	The deallocateCapacity operation shall raise the InvalidState exception, when the Device's adminState is LOCKED or operationalState is DISABLED.	3.1.3.2.4.5 .2.5	Test	Shall	
SCA418	The releaseObject operation shall call the releaseObject operation on all of the Device's aggregated Devices (i.e., those Devices that are contained within the AggregateDevice's devices attribute).	3.1.3.2.4.5 .3.3	Test	Shall	
SCA419	The releaseObject operation shall transition the Device's adminState to SHUTTING_DOWN state, when the Device's adminState is UNLOCKED.	3.1.3.2.4.5 .3.3	Test	Shall	
SCA420	The releaseObject operation shall cause the Device to be unavailable (i.e., released from the CORBA environment, and its logical Device's process terminated on the OS when applicable), when the Device's adminState transitions to LOCKED, meaning its aggregated Devices have been removed and the Device's usageState is IDLE.	3.1.3.2.4.5 .3.3	Test	Shall	
SCA421	The releaseObject operation shall cause the removal of its Device from the Device's compositeDevice.	3.1.3.2.4.5 .3.3	Test	Shall	
SCA422	The releaseObject operation shall unregister its Device from its DeviceManager.	3.1.3.2.4.5 .3.3	Test	Shall	
SCA423	The releaseObject operation shall raise the ReleaseError exception when releaseObject is not successful in releasing a logical Device due to internal processing errors that occurred within the Device being released.	3.1.3.2.4.5 .3.5	Test	Shall	
SCA424	The error number shall indicate an ErrorNumberType value (e.g. EACCES, EAGAIN, EBADF, EINVAL, EMFILE, ENAMETOOLONG, ENOENT, ENOMEM, ENOSPC, ENOTDIR).	3.1.3.2.5.3 .3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA426	The load operation shall load a file on the specified device based upon the input loadKind and fileName parameters using the input FileSystem parameter to retrieve the file.	3.1.3.2.5.5 .1.3	Test	Shall	
SCA427	The load operation shall support the load types as stated in the Device's software profile LoadType allocation properties.	3.1.3.2.5.5 .1.3	Test	Shall	
SCA428	The load operation shall keep track of the number of times a file has been successfully loaded.	3.1.3.2.5.5 .1.3	Not Testable	Shall	SCA-CCM-027
SCA429	The load operation shall raise the InvalidState exception when the Device's adminState is not UNLOCKED or operationalState is DISABLED.	3.1.3.2.5.5 .1.5	Not Testable	Shall	SCA-CCM-027
SCA430	The load operation shall raise the InvalidLoadKind exception when the input loadKind parameter is not supported.	3.1.3.2.5.5 .1.5	Test	Shall	
SCA431	The load operation shall raise the InvalidFileName exception when the file designated by the input filename parameter cannot be found.	3.1.3.2.5.5 .1.5	Test	Shall	
SCA432	The load operation shall raise the LoadFail exception when an attempt to load the device is unsuccessful.	3.1.3.2.5.5 .1.5	Test	Shall	
SCA433	The unload operation shall decrement the load count for the input filename parameter by one.	3.1.3.2.5.5 .2.3	Not Testable	Shall	
SCA434	The unload operation shall unload the application software on the device based on the input fileName parameter, when the file's load count equals zero.	3.1.3.2.5.5 .2.3	Test	Shall	
SCA435	The unload operation shall raise the InvalidState exception when the Device's adminState is LOCKED or its operationalState is DISABLED.	3.1.3.2.5.5 .2.5	Not Testable	Shall	
SCA436	The unload operation shall raise the InvalidFileName exception when the file designated by the input filename parameter cannot be found.	3.1.3.2.5.5 .2.5	Test	Shall	SCA-CCM-027

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA438	The error number shall indicate an ErrorNumberType value (e.g., ESRCH, EPERM, EINVAL).	3.1.3.2.6.3 .1	Test	Shall	
SCA442	The value for a stack size shall be an unsigned long.	3.1.3.2.6.3 .6	Test	Shall	
SCA443	The value for a priority shall be an unsigned long.	3.1.3.2.6.3 .7	Test	Shall	
SCA444	The error number shall indicate an ErrorNumberType value (e.g. EACCES, EBADF, EINVAL, EIO, EMFILE, ENAMETOOLONG, ENOENT, ENOMEM, ENOTDIR).	3.1.3.2.6.3 .8	Not Testable	Shall	
SCA445	The execute operation shall execute the function or file identified by the input name parameter using the input parameters and options parameters.	3.1.3.2.6.5 .1.3	Test	Shall	
SCA446	The execute operation shall convert the input parameters (id/value string pairs) parameter to the standard argv of the POSIX exec family of functions, where argv(0) is the function name.	3.1.3.2.6.5 .1.3	Test	Shall	
SCA447	The execute operation shall map the input parameters parameter to argv starting at index 1 as follows, argv (1) maps to input parameters (0) id and argv (2) maps to input parameters (0) value and so forth.	3.1.3.2.6.5 .1.3	Test	Shall	
SCA448	The execute operation shall use these options, when specified, to set the operating system's process/thread stack size and priority, for the executable image of the given input name parameter.	3.1.3.2.6.5 .1.3	Test	Shall	
SCA449	The execute operation shall return a unique processID for the process that it created or a processID of minus 1 (-1) when a process is not created.	3.1.3.2.6.5 .1.4	Test	Shall	SCA-CCM-026
SCA450	The execute operation shall raise the InvalidState exception when the Device's adminState is not UNLOCKED or operationalState is DISABLED.	3.1.3.2.6.5 .1.5	Not Testable	Shall	SCA-CCM-027

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA451	The execute operation shall raise the InvalidFunction exception when the function indicated by the input name parameter does not exist for the Device.	3.1.3.2.6.5 .1.5	Test	Shall	
SCA452	The execute operation shall raise the InvalidFileName exception when the file name indicated by the input name parameter does not exist for the Device.	3.1.3.2.6.5 .1.5	Test	Shall	
SCA453	The execute operation shall raise the InvalidParameters exception when the input parameters parameter item ID or value are not string types.	3.1.3.2.6.5 .1.5	Test	Shall	
SCA454	The execute operation shall raise the InvalidOptions exception when the input options parameter does not comply with sections 3.1.3.2.6.3.5 STACK_SIZE_ID and 3.1.3.2.6.3.6 PRIORITY_ID.	3.1.3.2.6.5 .1.5	Test	Shall	
SCA455	The execute operation shall raise the ExecuteFail exception when the operating system "execute" function for the device is not successful.	3.1.3.2.6.5 .1.5	Not Testable	Shall	
SCA456	The terminate operation shall terminate the execution of the process/thread designated by the processId input parameter on the Device.	3.1.3.2.6.5 .2.3	Test	Shall	
SCA457	The terminate operation shall raise the InvalidState exception when the Device's adminState is LOCKED or operationalState is DISABLED.	3.1.3.2.6.5 .2.5	Not Testable	Shall	SCA-CCM-027
SCA458	The terminate operation shall raise the InvalidProcess exception when the processId does not exist for the Device.	3.1.3.2.6.5 .2.5	Test	Shall	
SCA459	The readonly devices attribute shall contain a list of devices that have been added to this Device or a sequence length of zero if the Device has no aggregation relationships with other Devices.	3.1.3.2.7.4 .1	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA460	The addDevice operation shall add the input associatedDevice parameter to the AggregateDevice's devices attribute when the associatedDevice does not exist in the devices attribute.	3.1.3.2.7.5 .1.3	Test	Shall	
SCA461	The addDevice operation shall write a FAILURE_ALARM log record, upon unsuccessful adding of an associatedDevice to the AggregateDevice's devices attribute.	3.1.3.2.7.5 .1.3	Test	Shall	
SCA462	The addDevice operation shall raise the CF InvalidObjectReference when the input associatedDevice is a nil CORBA object reference.	3.1.3.2.7.5 .1.5	Test	Shall	
SCA463	The removeDevice operation shall remove the input associatedDevice parameter from the AggregateDevice's devices attribute.	3.1.3.2.7.5 .2.3	Test	Shall	
SCA464	The removeDevice operation shall write a FAILURE_ALARM log record, upon unsuccessful removal of the associatedDevice from the AggregateDevice's devices attribute.	3.1.3.2.7.5 .2.3	Test	Shall	
SCA465	The removeDevice operation shall raise the CF InvalidObjectReference when the input associatedDevice is a nil CORBA object reference or does not exist in the AggregateDevice's devices attribute.	3.1.3.2.7.5 .2.5	Test	Shall	
SCA466	The readonly identifier attribute shall contain the instance-unique identifier for a DeviceManager.	3.1.3.2.8.4 .1	Not Testable	Shall	
SCA467	The identifier shall be identical to the deviceconfiguration element id attribute of the DeviceManager's Device Configuration Descriptor (DCD) file.	3.1.3.2.8.4 .1	Test	Shall	
SCA468	The readonly label attribute shall contain the DeviceManager's label.	3.1.3.2.8.4 .2	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA469	The readonly fileSys attribute shall contain the FileSystem associated with this DeviceManager or a nil CORBA object reference if no FileSystem is associated with this DeviceManager.	3.1.3.2.8.4.3	Test	Shall	
SCA470	The readonly deviceConfigurationProfile attribute shall contain either a profile element with a file reference to the DeviceManager's Device Configuration Descriptor (DCD) profile or the XML for the DeviceManager's DCD profile.	3.1.3.2.8.4.4	Test	Shall	
SCA471	The readonly registeredDevices attribute shall contain a list of Devices that have registered with this DeviceManager or a sequence length of zero if no Devices have registered with the DeviceManager.	3.1.3.2.8.4.5	Test	Shall	
SCA472	The readonly registeredServices attribute shall contain a list of Services that have registered with this DeviceManager or a sequence length of zero if no Services have registered with the DeviceManager.	3.1.3.2.8.4.6	Test	Shall	
SCA473	The DeviceManager upon start up shall register itself with a DomainManager.	3.1.3.2.8.5	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA474	A DeviceManager shall use the DeviceManager's deviceConfigurationProfile attribute for determining:1. Services to be deployed for this DeviceManager (for example, log(s)),2. Devices to be created for this DeviceManager (when the DCD deployondevice element is not specified then the DCD componentinstantiation element is deployed on the same hardware device as the DeviceManager), 3. Devices to be deployed on (executing on) another Device,4. Devices to be aggregated to another Device,5. Mount point names for FileSystems,6. The DCD's id attribute for the DeviceManager's identifier attribute value, and7. The DCD's name attribute for the DeviceManager's label attribute value.	3.1.3.2.8.5	Not Testable	Shall	SCA-CCM-025
SCA475	The DeviceManager shall create FileSystem components implementing the FileSystem interface for each OS file system.	3.1.3.2.8.5	Test	Shall	
SCA476	If multiple FileSystems are to be created, the DeviceManager shall mount created FileSystems to a FileManager component (widened to a FileSystem through the FileSys attribute).	3.1.3.2.8.5	Test	Shall	

SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA478	The DeviceManager shall supply execute operation parameters (IDs and format values) for a Device consisting of: A. DeviceManager IOR - The ID is "DEVICE_MGR_IOR" and the value is a string that is the DeviceManager stringified IOR. B. Profile Name - The ID is "PROFILE_NAME" and the value is a CORBA string that is the full mounted file system file path name. C. Device Identifier - The ID is "DEVICE_ID" and the value is a string that corresponds to the DCD componentinstantiation id attribute. D. Device Label - The ID is "DEVICE_LABEL" and the value is a string that corresponds to the DCD componentinstantiation usage element. This parameter is only used when the DCD componentinstantiation usage element is specified. E. Composite Device IOR - The ID is "Composite_DEVICE_IOR" and the value is a string that is an AggregateDevice stringified IOR. This parameter is only used when the DCD componentinstantiation element is a composite part of	3.1.3.2.8.5	Test	Shall	SCA-CCM-025
SCA479	The DeviceManager shall pass the componentinstantiation element "execparam" properties that have values as parameters.	3.1.3.2.8.5	Test	Shall	
SCA480	The DeviceManager shall pass "execparam" parameters' IDs and values as string values.	3.1.3.2.8.5	Test	Shall	
SCA481	The DeviceManager shall use the componentinstantiation element's SPD implementation code's stacksize and priority elements, when specified, for the execute options parameters.	3.1.3.2.8.5	Test	Shall	
SCA482	The DeviceManager shall initialize and configure logical Devices that are started by the DeviceManager after they have registered with the DeviceManager.	3.1.3.2.8.5	Not Testable	Shall	SCA-CCM-027

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA483	The DeviceManager shall configure a DCD's componentinstantiation element provided the componentinstantiation element has "configure" readwrite or writeonly properties with values.	3.1.3.2.8.5	Test	Shall	
SCA484	If a Service is deployed by the DeviceManager, the DeviceManager shall supply execute operation parameters (IDs and format values) consisting of: a. DeviceManager IOR - The ID is "DEVICE_MGR_IOR" and the value is a string that is the DeviceManager stringified IOR. b. Service Name - The ID is "SERVICE_NAME" and the value is a string that corresponds to the DCD componentinstantiation usagename element.	3.1.3.2.8.5	Test	Shall	
SCA485	The registerDevice operation shall add the input registeringDevice to the DeviceManager's registeredDevices attribute when the input registeringDevice does not already exist in the registeredDevices attribute.	3.1.3.2.8.6 .1.3	Test	Shall	
SCA486	The registerDevice operation shall register the registeringDevice with the DomainManager when the DeviceManager has already registered to the DomainManager and the registeringDevice has been successfully added to the DeviceManager's registeredDevices attribute.	3.1.3.2.8.6 .1.3	Test	Shall	
SCA487	The registerDevice operation shall write a FAILURE_ALARM log record to a DomainManager's Log, upon unsuccessful registration of a Device to the DeviceManager's registeredDevices.	3.1.3.2.8.6 .1.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA488	The registerDevice operation shall raise the CF InvalidObjectReference when the input registeringDevice is a nil CORBA object reference.	3.1.3.2.8.6 .1.5	Test	Shall	
SCA489	The unregisterDevice operation shall remove the input registeredDevice from the DeviceManager's registeredDevices attribute.	3.1.3.2.8.6 .2.3	Test	Shall	
SCA490	The unregisterDevice operation shall unregister the input registeredDevice from the DomainManager when the input registeredDevice is registered with the DeviceManager and the DeviceManager is not shutting down.	3.1.3.2.8.6 .2.3	Test	Shall	
SCA491	The unregisterDevice operation shall write a FAILURE_ALARM log record, when it cannot successfully remove a registeredDevice from the DeviceManager's registeredDevices.	3.1.3.2.8.6 .2.3	Test	Shall	
SCA492	The unregisterDevice operation shall raise the CF InvalidObjectReference when the input registeredDevice is a nil CORBA object reference or does not exist in the DeviceManager's registeredDevices attribute.	3.1.3.2.8.6 .2.5	Test	Shall	
SCA493	The registerService operation shall add the input registeringService to the DeviceManager's registeredServices attribute when the input registeringService does not already exist in the registeredServices attribute.	3.1.3.2.8.6 .3.3	Test	Shall	
SCA494	The registerService operation shall register the registeringService with the DomainManager when the DeviceManager has already registered to the DomainManager and the registeringService has been successfully added to the DeviceManager's registeredServices attribute.	3.1.3.2.8.6 .3.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA495	The registerService operation shall write a FAILURE_ALARM log record, upon unsuccessful registration of a Service to the DeviceManager's registeredServices.	3.1.3.2.8.6 .3.3	Not Testable	Shall	SCA-CCM-022
SCA496	The registerService operation shall raise the CF InvalidObjectReference exception when the input registeringService is a nil CORBA object reference.	3.1.3.2.8.6 .3.5	Test	Shall	
SCA497	The unregisterService operation shall remove the input registeredService from the DeviceManager's registeredServices attribute.	3.1.3.2.8.6 .4.3	Test	Shall	
SCA498	The unregisterService operation shall unregister the input registeredService from the DomainManager when the input registeredService is registered with the DeviceManager and the DeviceManager is not in the shutting down state.	3.1.3.2.8.6 .4.3	Test	Shall	
SCA499	The unregisterService operation shall write a FAILURE_ALARM log record, when it cannot successfully remove a registeredService from the DeviceManager's registeredServices.	3.1.3.2.8.6 .4.3	Test	Shall	
SCA500	The unregisterService operation shall raise the CF InvalidObjectReference when the input registeredService is a nil CORBA object reference or does not exist in the DeviceManager's registeredServices attribute.	3.1.3.2.8.6 .4.5	Test	Shall	
SCA501	The shutdown operation shall unregister the DeviceManager from the DomainManager.	3.1.3.2.8.6 .5.3	Test	Shall	
SCA502	The shutdown operation shall perform releaseObject on all of the DeviceManager's registered Devices (DeviceManager's registeredDevices attribute).	3.1.3.2.8.6 .5.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA503	The shutdown operation shall cause the DeviceManager to be unavailable (i.e. released from the CORBA environment and its process terminated on the OS), when all of the DeviceManager's registered Devices are unregistered from the DeviceManager.	3.1.3.2.8.6 .5.3	Test	Shall	
SCA504	The getComponentImplementationId operation shall return the SPD implementation element's ID attribute that matches the SPD implementation element used to create the component identified by the input componentInstantiationId parameter.	3.1.3.2.8.6 .6.4	Test	Shall	
SCA505	The getComponentImplementationId operation shall return an empty string when the input componentInstantiationId parameter does not match the ID attribute of any SPD implementation element used to create the component.	3.1.3.2.8.6 .6.4	Test	Shall	
SCA506	Framework Services Interfaces shall be implemented using the CF IDL presented in Appendix C.	3.1.3.3	Test	Shall	
SCA507	The error number shall indicate an ErrorNumberType value (e.g., EFBIG, ENOSPC, EROFS).	3.1.3.3.1.3 .1	Not Testable	Shall	
SCA509	The readonly fileName attribute shall contain the file name given to the FileSystem open/create operation.	3.1.3.3.1.4 .1	Test	Shall	SCA-CCM-027
SCA510	The readonly filePointer attribute shall contain the file position where the next read or write will occur.	3.1.3.3.1.4 .2	Not Testable	Shall	
SCA511	The read operation shall read, from the referenced file, the number of octets specified by the input length parameter and advance the value of the filePointer attribute by the number of octets actually read.	3.1.3.3.1.5 .1.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA512	The read operation shall read less than the number of octets specified in the input-length parameter, when an end of file is encountered.	3.1.3.3.1.5 .1.3	Test	Shall	
SCA513	The read operation shall return via the out Message parameter a CF OctetSequence that equals the number of octets actually read from the File.	3.1.3.3.1.5 .1.4	Test	Shall	
SCA514	If the filePointer attribute value reflects the end of the File, the read operation shall return a 0-length CF OctetSequence.	3.1.3.3.1.5 .1.4	Test	Shall	
SCA515	The read operation shall raise the IOException when a read error occurs.	3.1.3.3.1.5 .1.5	Test	Shall	
SCA516	The write operation shall write data to the file referenced.	3.1.3.3.1.5 .2.3	Test	Shall	
SCA517	If the write is successful, the write operation shall increment the filePointer attribute to reflect the number of octets written.	3.1.3.3.1.5 .2.3	Test	Shall	
SCA518	If the write is unsuccessful, the filePointer attribute value shall maintain or be restored to its value prior to the write operation call.	3.1.3.3.1.5 .2.3	Test	Shall	
SCA519	The write operation shall raise the IOException when a write error occurs.	3.1.3.3.1.5 .2.5	Test	Shall	
SCA520	The sizeOf operation shall return the number of octets stored in the file.	3.1.3.3.1.5 .3.4	Test	Shall	
SCA521	The sizeOf operation shall raise the CF FileException when a file-related error occurs (e.g., file does not exist anymore).	3.1.3.3.1.5 .3.5	Not Testable	Shall	SCA-CCM-025
SCA522	The close operation shall release any OE file resources associated with the component.	3.1.3.3.1.5 .4.3	Not Testable	Shall	
SCA523	The close operation shall make the file unavailable to the component.	3.1.3.3.1.5 .4.3	Test	Shall	
SCA524	The close operation shall raise the CF FileException when it cannot successfully close the file.	3.1.3.3.1.5 .4.5	Not Testable	Shall	
SCA525	The setFilePointer operation shall set the filePointer attribute value to the input filePointer.	3.1.3.3.1.5 .5.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA526	The setFilePointer operation shall raise the CP FileException when the file pointer for the referenced file cannot be set to the value of the input filePointer parameter.	3.1.3.3.1.5 .5.5	Test	Shall	SCA-CCM-029
SCA527	The setFilePointer operation shall raise the InvalidFilePointer exception when the value of the filePointer parameter exceeds the file size.	3.1.3.3.1.5 .5.5	Test	Shall	
SCA528	At a minimum, the FileSystem shall support name, kind, and size information for a file.	3.1.3.3.2.3 .3	Test	Shall	
SCA529	The value for created time shall be unsigned long long and measured in seconds since 00:00:00 UTC, Jan.	3.1.3.3.2.3 .6	Not Testable	Shall	SCA-CCM-025
SCA530	The value for modified time property shall be unsigned long long and measured in seconds since 00:00:00 UTC, Jan.	3.1.3.3.2.3 .7	Not Testable	Shall	SCA-CCM-025
SCA531	The value for last access time property shall be unsigned long long and measured in seconds since 00:00:00 UTC, Jan.	3.1.3.3.2.3 .8	Not Testable	Shall	SCA-CCM-025
SCA532	The remove operation shall remove the file with the given filename.	3.1.3.3.2.5 .1.3	Test	Shall	
SCA533	The remove operation shall raise the InvalidFileName exception when the filename is not a valid filename or not an absolute pathname.	3.1.3.3.2.5 .1.5	Test	Shall	
SCA534	The remove operation shall raise the CF FileException when a file-related error occurs.	3.1.3.3.2.5 .1.5	Not Testable	Shall	SCA-CCM-027
SCA535	The copy operation shall copy the source file with the specified sourceFileName to the destination file with the specified destinationFileName.	3.1.3.3.2.5 .2.3	Test	Shall	
SCA536	The copy operation shall raise the CF FileException when a file-related error occurs.	3.1.3.3.2.5 .2.5	Not Testable	Shall	SCA-CCM-027
SCA537	The copy operation shall raise the InvalidFileName exception when the filename is not a valid file name or not an absolute pathname.	3.1.3.3.2.5 .2.5	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA538	The exists operation shall check to see if a file exists based on the fileName parameter.	3.1.3.3.2.5 .3.3	Test	Shall	
SCA539	The exists operation shall return True if the file exists, or False if it does not.	3.1.3.3.2.5 .3.4	Test	Shall	
SCA540	The exists operation shall raise the InvalidFileName exception when fileName is not a valid file name or not an absolute pathname.	3.1.3.3.2.5 .3.5	Test	Shall	
SCA541	The list operation shall return a list of file information based upon the search pattern given.	3.1.3.3.2.5 .4.3	Test	Shall	
SCA542	The list operation shall support the following wildcard characters for base file names (i.e., the part after the right-most slash):(1) * used to match any sequence of characters (including null).(2) ? used to match any single character.	3.1.3.3.2.5 .4.3	Test	Shall	
SCA543	The list operation shall return a FileInformationSequence for files that match the wildcard specification as specified in the input pattern parameter.	3.1.3.3.2.5 .4.4	Test	Shall	
SCA545	The list operation shall raise the InvalidFileName exception when the input pattern does not start with a slash "/" or cannot be interpreted due to unexpected characters.	3.1.3.3.2.5 .4.5	Test	Shall	
SCA546	The list operation shall raise the FileException when a file-related error occurs.	3.1.3.3.2.5 .4.5	Test	Shall	
SCA547	The create operation shall create a new File based upon the provided fileName attribute.	3.1.3.3.2.5 .5.3	Test	Shall	
SCA548	The create operation shall return a File component reference to the opened file.	3.1.3.3.2.5 .5.4	Test	Shall	
SCA549	The create operation shall return a null file component reference if an error occurs.	3.1.3.3.2.5 .5.4	Not Testable	Shall	SCA-CCM-026
SCA550	The create operation shall raise the CF FileException if the file already exists or another file error occurred.	3.1.3.3.2.5 .5.5	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA551	The create operation shall raise the InvalidFileName exception when a fileName is not a valid file name or not an absolute pathname.	3.1.3.3.2.5 .5.5	Test	Shall	
SCA552	The open operation shall open a file based upon the input fileName.	3.1.3.3.2.5 .6.3	Test	Shall	
SCA555	The open operation shall open the file for write access when the read_Only parameter is false.	3.1.3.3.2.5 .6.3	Test	Shall	
SCA556	The open operation shall return a File component parameter on successful completion.	3.1.3.3.2.5 .6.4	Test	Shall	
SCA557	The open operation shall return a null file component reference if the open operation is unsuccessful.	3.1.3.3.2.5 .6.4	Test	Shall	SCA-CCM-028
SCA558	The open operation shall raise the CF FileException if the file does not exist or another file error occurred.	3.1.3.3.2.5 .6.5	Not Testable	Shall	
SCA559	The open operation shall raise the InvalidFileName exception when the filename is not a valid file name or not an absolute pathname.	3.1.3.3.2.5 .6.5	Test	Shall	
SCA560	The mkdir operation shall create a FileSystem directory based on the directoryName given.	3.1.3.3.2.5 .7.3	Test	Shall	
SCA561	The mkdir operation shall create all parent directories required to create the directoryName path given.	3.1.3.3.2.5 .7.3	Test	Shall	
SCA562	The mkdir operation shall raise the CF FileException if a file-related error occurred during the operation.	3.1.3.3.2.5 .7.5	Not Testable	Shall	SCA-CCM-027
SCA563	The mkdir operation shall raise the InvalidFileName exception when the directoryName is not a valid directory name.	3.1.3.3.2.5 .7.5	Test	Shall	
SCA564	The rmdir operation shall remove a FileSystem directory, based on the directoryName given, only if the directory is empty (no files exist in directory).	3.1.3.3.2.5 .8.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA565	The rmdir operation shall raise the CF FileException when the directory does not exist, if the directory is not empty, or another file-related error occurred.	3.1.3.3.2.5 .8.5	Test	Shall	
SCA566	The rmdir operation shall raise the InvalidFileName exception when the directoryName is not a valid directory name.	3.1.3.3.2.5 .8.5	Test	Shall	
SCA567	The query operation shall return file system information to the calling client based upon the given fileSystemProperties' ID.	3.1.3.3.2.5 .9.3	Test	Shall	
SCA568	As a minimum, the FileSystem query operation shall support the following fileSystemProperties:1. SIZE - an ID value of "SIZE" causes query to return an unsigned long long containing the file system size (in octets).2. AVAILABLE SPACE - an ID value of "AVAILABLE SPACE" causes the query operation to return an unsigned long long containing the available space on the file system (in octets), See section 3.1.3.3.2.3.2 for the constants for the fileSystemProperties.	3.1.3.3.2.5 .9.3	Test	Shall	SCA-CCM-025
SCA569	The query operation shall raise the UnknownFileSystemProperties exception when the given file system property is not recognized.	3.1.3.3.2.5 .9.5	Test	Shall	
SCA570	The MountType structure shall identify the FileSystems mounted within the FileManager.	3.1.3.3.3.3 .1	Test	Shall	SCA-CCM-030
SCA573	The mount operation shall associate the specified FileSystem with the given mountPoint.	3.1.3.3.3.5 .1.3	Test	Shall	
SCA574	A mountPoint name shall begin with a "/".	3.1.3.3.3.5 .1.3	Test	Shall	
SCA575	The mount operation shall raise the InvalidFileName exception when the input file name is invalid.	3.1.3.3.3.5 .1.5	Test	Shall	SCA-CCM-025

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA576	The mount operation shall raise the MountPointAlreadyExists exception when the mountPoint already exists in the file manager.	3.1.3.3.3.5 .1.5	Test	Shall	
SCA577	The mount operation shall raise the InvalidFileSystem exception when the input FileSystem is a null object reference.	3.1.3.3.3.5 .1.5	Test	Shall	
SCA578	The unmount operation shall remove a mounted FileSystem from the FileManager whose mounted name matches the input mountPoint name.	3.1.3.3.3.5 .2.3	Test	Shall	
SCA579	The unmount operation shall raise the NonExistentMount exception when the mountPoint does not exist.	3.1.3.3.3.5 .2.5	Test	Shall	
SCA580	The getMounts operation shall return a sequence of Mount structures that describe the mounted FileSystems.	3.1.3.3.3.5 .3.3	Test	Shall	
SCA581	The FileManager interface shall support a federated, or distributed, file system that may span multiple FileSystem components.	3.1.3.3.3.5 .4	Test	Shall	
SCA582	The FileManager's inherited FileSystem operations behavior shall implement the requirements of the FileSystem operations against the mounted file systems.	3.1.3.3.3.5 .4	Test	Shall	
SCA583	The FileManager's FileSystem operations shall remove the FileSystem mounted name from the input fileName before passing the fileName to an operation on a mounted FileSystem.	3.1.3.3.3.5 .4	Test	Shall	
SCA584	The FileManager shall use the mounted FileSystem for FileSystem operations based upon the mounted FileSystem name that exactly matches the input fileName to the lowest matching subdirectory.	3.1.3.3.3.5 .4	Test	Shall	
SCA585	The query operation shall return the combined mounted file systems information to the calling client based upon the given input FileSystemProperties' IDs.	3.1.3.3.3.5 .5.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA586	As a minimum, the query operation shall support the following input fileSystemProperties IDs:1. SIZE - a property item ID value of "SIZE" will cause the query operation to return the combined total size of all the mounted file system as an unsigned long long property value.2. AVAILABLE_SPACE - a property item ID value of "AVAILABLE_SPACE" will cause the query operation to return the combined total available space (in octets) of all the mounted file system as unsigned long long property value.	3.1.3.3.3.5 .5.3	Test	Shall	
SCA587	The query operation shall raise the UnknownFileSystemProperties exception when the input fileSystemProperties parameter contains an invalid property ID	3.1.3.3.3.5 .5.5	Test	Shall	
SCA588	Domain Profile files shall use the format of the Document Type Definitions (DTDs) provided in Appendix D.	3.1.3.4	Test	Shall	
SCA589	DTD files are installed in the domain and shall have ".dtd" as their filename extension.	3.1.3.4	Test	Shall	
SCA590	All XML files shall have as the first two lines as an XML declaration (?xml) and a document type declaration (!DOCTYPE).	3.1.3.4	Test	Shall	
SCA591	A Software Package Descriptor file shall have a ".spd.xml" extension.	3.1.3.4.1	Test	Shall	
SCA592	A Software Component Descriptor file shall have a ".scd.xml" extension.	3.1.3.4.2	Test	Shall	
SCA593	A Software Assembly Descriptor file shall have a ".sad.xml" extension.	3.1.3.4.3	Test	Shall	
SCA594	A Properties File shall have a ".prf.xml" extension.	3.1.3.4.4	Test	Shall	
SCA595	A Device Package Descriptor File shall have a ".dpd.xml" extension.	3.1.3.4.5	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA596	A Device Configuration Descriptor file shall have a ".dcd.xml" extension.	3.1.3.4.6	Test	Shall	
SCA597	A DomainManager Configuration Descriptor file shall have a ".dmd.xml" extension.	3.1.3.4.8	Test	Shall	
SCA598	The error number shall indicate an ErrorNumberType value (e.g., EBADF, EEXIST, EISDIR, EMFILE, ENFILE, ENOENT, ENOSPC, ENOTDIR, ENOTEMPTY, EROFS).	3.1.3.5.3	Test	Shall	
SCA599	The error number shall indicate an ErrorNumberType value (e.g., ENAMETOOLONG).	3.1.3.5.4	Test	Shall	
SCA603	Applications shall be limited to using the OS services that are designated as mandatory in the SCA AEP as specified in section 3.1.1.	3.2.1.1	Test	Shall	
SCA604	Applications shall perform file access through the CF File interfaces.	3.2.1.1	Test	Shall	
SCA605	Application file names shall not exceed 40 characters.	3.2.1.1	Test	Shall	SCA-CCM-025
SCA606	To ensure controlled termination, applications shall have a signal handler installed for the POSIX-defined SIGQUIT signal.	3.2.1.1	Test	Shall	SCA-CCM-025
SCA607	Applications shall be limited to using CORBA and CORBA services as specified in section 3.1.2.	3.2.1.2	Test	Shall	
SCA608	Applications shall implement the CF interfaces as specified in section 3.1.3.1 using the corresponding IDL in Appendix C.	3.2.1.3	Test	Shall	
SCA609	Each application process that uses Naming Service shall support the Naming Context IOR, Name Binding, and the identifier execute parameters as described in 3.1.3.2.2.5.1.3 in addition to their user-defined execute properties in the component's SPD.	3.2.1.3	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA610	The application shall bind its components' object reference to the Naming Context IOR using the Name Binding parameter as described in section 3.1.2.2.1.	3.2.1.3	Test	Shall	SCA-CCM-029
SCA611	Each executable component of an application shall set its identifier attribute using the component identifier execute parameter.	3.2.1.3	Test	Shall	
SCA612	Each executable component of an application shall accept arguments of the form described in 3.1.3.2.6.5.1.3.	3.2.1.3	Test	Shall	
SCA613	Applications' components and DeviceManagers shall be provided with Domain Profile files per 3.1.3.4.	3.2.1.3	Inspection/Analysis	Shall	
SCA614	Interfaces provided by a component shall be described in a Software Component Descriptor file as provides ports.	3.2.2	Test	Shall	
SCA615	Interfaces used by a component shall be described in a Software Component Descriptor file as uses ports.	3.2.2	Test	Shall	
SCA616	The application's external interfaces shall be visible and defined as described herein if:1. the application provides a service that is used by more than one application, or2. the service user requires the interface to be common across access service implementations (e.g., HCI).	3.2.2	Test	Shall	SCA-CCM-025
SCA617	Each hardware device used by an application Resource component shall have an associated logical Device interface.	3.3	Test	Shall	
SCA618	A logical Device's executable parameters shall accept arguments of the form described in 3.1.3.2.6.5.1.3.	3.3.1	Test	Shall	
SCA619	A logical Device shall accept the executable parameters as specified described in 3.1.3.2.8.5.	3.3.1	Test	Shall	
SCA620	Logical Devices shall be limited to using CORBA and CORBA services as specified in section 3-2.	3.3.2	Test	Shall	SCA-CCM-029

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA621	A logical Device shall register itself with a DeviceManager using the executable DeviceManager IOR parameter per 3.1.3.2.8.5.	3.3.3	Test	Shall	SCA-CCM-025
SCA622	An aggregated logical Device shall add itself to a composite Device using the executable Composite Device IOR parameter per 3.1.3.2.8.5.	3.3.3	Test	Shall	SCA-CCM-025
SCA623	The executable parameters (PROFILE_NAME, COMPOSITE_DEVICE_IOR, DEVICE_ID and DEVICE_LABEL) as described in 3.1.3.2.8.5 shall be used to set the Device's softwareProfile, compositeDevice, identifier, and label attributes.	3.3.3	Test	Shall	SCA-CCM-025
SCA624	A Device that has other Devices associated with it shall provide a "provides" port that implements the AggregateDevice interface.	3.3.3	Test	Shall	
SCA625	The "provides" port name shall be named "CompositeDevice".	3.3.3	Test	Shall	
SCA626	Each logical Device shall have a SPD, SCD, DPD, and one or more Properties Descriptors as described in section 3.1.3.4.	3.3.4	Test	Shall	
SCA627	For each logical Device, allocation properties shall be defined in its referenced SPD's property file.	3.3.4	Test	Shall	
SCA628	Software developed for an SCA-compliant product shall be developed in a standard higher order language, except at provided below, for ease in processor portability.	3.4.1.1	Not Testable	Shall	SCA-CCM-027
SCA630	Legacy software shall be interfaced to the core framework in accordance with this specification.	3.4.1.2	Test	Shall	SCA-CCM-025
SCA632	Each supplied hardware device shall be provided with its associated Domain Profile files as defined in section 3.1.3.4, Domain Profile.	4.5.1	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA633	Hardware critical interfaces shall be defined in Interface Control Documents that are available to other parties without restriction.	4.5.2.1	Inspection/Analysis	Shall	
SCA634	Hardware critical interfaces shall be in accordance with commercial or government standards, unless there are program performance requirements that require a non-standard interface.	4.5.2.2	Not Testable	Shall	
SCA635	If so required, the non-standard interface shall be clearly and openly documented to the extent that interfacing or replacement hardware can be developed by other parties without restriction.	4.5.2.2	Not Testable	Shall	SCA-CCM-025
SCA636	In addition to the above, interface selection should consider the availability of supporting products that have wide usage, are available from multiple vendors, and are expected to have long-term support in the industry.	4.5.2.2.1	Not Testable	Shall	
SCA639	The Application releaseObject operation shall only disconnect components' ports that are authorized by an authentication service.	5.1.1	Not Testable	Conditional	
SCA640	The Application releaseObject operation shall only request removal of the Application's Ports' access setups from the access control database	5.1.1	Not Testable	Conditional	
SCA641	The Application releaseObject operation shall log a Security_Alarm event when unable to disconnect components' ports because authorization was not granted by an authentication service.	5.1.1	Not Testable	Conditional	
SCA642	Application components' SPD implementation dependency propertyref elements shall indicate a dependency to a red or black device (directly or indirectly).	5.1.1	Test	Conditional	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA643	The ApplicationFactory create operation shall only create components that are authorized by an authentication service.	5.1.2	Not Testable	Conditional	
SCA644	The ApplicationFactory create operation shall only connect components' ports together that are authorized by an authentication service.	5.1.2	Not Testable	Conditional	
SCA645	If port connections between components need to be access-controlled during execution, then the ApplicationFactory create operation shall provide an update to the access control database.	5.1.2	Not Testable	Conditional	
SCA646	The ApplicationFactory create operation shall provide updates to an access control database for all components ports connections as stated in the application's SAD file.	5.1.2	Not Testable	Conditional	
SCA647	The ApplicationFactory shall log a Security_Alarm event when unable to connect ports or create components because authorization was not granted by an authentication service.	5.1.2	Not Testable	Conditional	
SCA648	The DomainManager installApplication operation shall send the information specified in the Security Supplement to the control/bypass mechanism Resource for the black-side components being accessed by red-side components and for red-side components being accessed by black-side components.	5.1.3	Test	Conditional	
SCA649	The DomainManager uninstallApplication operation shall request removal of the application's information specified in the Security Supplement from the control/status bypass mechanism.	5.1.3	Test	Conditional	
SCA650	Devices SPD properties shall have an allocation property that indicates a red or black device.	5.1.3	Test	Conditional	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA651	Parent Devices shall send their child Devices information specified in the Security Supplement to the control/status bypass mechanism.	5.1.3	Test	Conditional	
SCA652	A parentless Device shall send its information specified in the Security Supplement to the control/status bypass mechanism.	5.1.3	Test	Conditional	
SCA654	This clause defines the constraints that an application strictly conforming to one of the profiles shall observe when using each of the functions required by that profile.	B.3	Not Testable	Shall	
SCA655	Any Ada application shall be restricted to using the equivalent Ada functionality, as defined in POSIX.5b, designated as mandatory by this profile or may use the C interface.	B.3	Test	Shall	
SCA656	PRI -- The primary file system shall generate an error for pathname components longer than NAME_MAX.	B.3.1	Test	Shall	
SCA657	The functions in Table B 3 shall behave as described in the referenced clauses.	B.3.1.1	Test	Shall	
SCA658	The functions listed in Table B 4 shall behave as described in the referenced clauses.	B.3.1.2	Test	Shall	
SCA659	The functions listed in Table B 5 shall behave as described in the referenced clauses.	B.3.1.3	Test	Shall	
SCA660	The functions listed in Table B 6 shall behave as described in the referenced clauses, except for the following constraints:	B.3.1.4	Test	Shall	
SCA661	(1) An application strictly conforming to SCA AEP shall be considered erroneous if any signal results in abnormal termination of the process because these profiles do not support multiple processes.	B.3.1.4	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA662	(2) An application strictly conforming to SCA AEP shall not call the kill() function with a negative argument because these profiles do not require process group functionality.	B.3.1.4	Test	Shall	
SCA663	The functions listed in Table B 7 shall behave as described in the referenced clauses.	B.3.1.5	Test	Shall	
SCA664	The functions listed in Table B 8 shall behave as described in the referenced clauses.	B.3.1.6	Test	Shall	
SCA665	The functions listed in Table B 9 shall behave as described in the referenced clauses, except for the following constraint:	B.3.1.7	Test	Shall	
SCA666	(1) An application strictly conforming to SCA AEP shall be guaranteed that the file mode creation mask for any object created by any process is SS--IIRRWXXUU; that is, the object shall be fully accessible to the creator.	B.3.1.7	Inspection/Analysis	Shall	
SCA667	The functions listed in Table B 10 shall behave as described in the referenced clauses.	B.3.1.8	Test	Shall	
SCA668	The functions listed in Table B 11 shall behave as described in the referenced clauses.	B.3.1.9	Test	Shall	
SCA669	The functions listed in Table G-12 shall behave as described in the referenced clauses.	B.3.1.10	Test	Shall	
SCA670	The functions listed in Table B 13 shall behave as described in the referenced clauses.	B.3.1.11	Test	Shall	
SCA671	The function listed in Table B 14 shall behave as described in the referenced clause.	B.3.1.12	Test	Shall	
SCA672	The function listed in Table B 15 shall behave as described in the referenced clause.	B.3.1.13	Test	Shall	
SCA673	The functions listed in Table B 16, Table B 17, Table B 18, Table B 19, Table B 20, and Table B 21 shall behave as described in the referenced clauses.	B.3.1.14	Test	Shall	
SCA676	The function listed in Table A-25 shall behave as described in the referenced clause.	B.3.3.1	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
SCA677	The functions listed in Table B 26 shall behave as described in the referenced clauses.	B.3.3.2	Test	Shall	
SCA678	The functions listed in Table B 27 shall behave as described in the referenced clauses.	B.3.3.3	Test	Shall	
SCA679	The functions listed in Table B 28 shall behave as described in the referenced clauses.	B.3.3.4	Test	Shall	

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SCA Tag	Requirement text	Section Number	Verification Method	Requirement Type	Change-Status
Summary of Analysis					
	Not Testable		43		
	Inspection/Analy		11		
	Demonstration		6		
	Test		539		
	Witness		0		
	Total Verificatiion Method		599		
	Total Blank		0		
	Shall			554	
	Conditional			45	
	Total Requirement Type			599	
	Total Blank			0	