## Cougaar

Cougaar Agent Architecture Open-Source site

## **Catalog of System Properties**

Webmasters Note: This page was restored from the 10 October 2006 copy on the WayBack machine and might have some inaccuracies. The embedded links still point to the WayBack machine. Please use the forums to report problems. Thank you.

- org.cougaar.agent.defaultFile The name of the default XML configuration file for an agent, used if the agent configuration is not found in the node's XML (-Dorg.cougaar.society.file) or agent's XML (name+".xml"). Defaults to "DefaultAgent.xml" (See class XMLComponentInitializerServiceProvider)
- org.cougaar.core.agent quiet Makes standard output as quiet as possible. If Heartbeat is running, will not print dots. (See class Heartbeat)
- org.cougaar.core.agent.demoControl.namingTimeout Timeout in milliseconds for a DemoControlService setSocietyTime lookup of all target nodes in the naming service. Defaults to 30000 millis. (See class DemoControl)
- org.cougaar.core.agent.enablePublishException When set to true, collects stack frames for each published object in order to pinpoint both sides of publish conflicts. This is extremely expensive. (See class Blackboard)
- org.cougaar.core.agent.heartbeat Unless disabled, the node will provide a heartbeat to the vm. (See class Heartbeat)
- org.cougaar.core.agent.heartbeat If enabled, a low-priority thread runs and prints a '.' every few seconds
  when nothing else much is going on. This is a one-per-vm function. Default true. (See class
  HeartbeatComponent)
- org.cougaar.core.agent.idle.verbose If true, will print elapsed time (seconds) since the agent's start every idle.interval millis. (See class Heartbeat)
- org.cougaar.core.agent.idle.verbose.interval=60000 The number of milliseconds between verbose idle reports. (See class Heartbeat)
- org.cougaar.core.agent.idleInterval How long between idle detection and heartbeat cycles (prints '.'); (See class Heartbeat)
- org.cougaar.core.agent.quiet Makes standard output as quiet as possible. (See class MessageSwitch)
- org.cougaar.core.agent.savePriorPublisher When set to true, will collect extra information on each publish to
  detect problems with multiple adds, deletes, etc by complaining about unexpected state changes. This adds
  significant runtime overhead. (See class Blackboard)
- org.cougaar.core.agent.service.alarm.Timer.epsilon=10000 milliseconds considered a relatively long time for alarm delivery. (See class Timer)
- org.cougaar.core.agent.service.alarm.Timer.useSchedulable=true Set to false to use in-band delivery of alarm sounding rather than using a schedulable to wrap the delivery. (See class Timer)
- org.cougaar.core.agent.showTraffic If *true*, shows '+' and '-' on message sends and receives except for white pages messages. If *wp*, then shows both the above +/- for regular send/receive and W/w for white pages

- send/receive. (See class MessageSwitch)
- org.cougaar.core.agent.startTime The date to use as the start of execution for demonstration purposes. Accepts date/time in the form of MM/dd/yyy H:mm:ss where the time sequence is optional. If the time is not given, then it defaults to midnight on the specified date. agentStartTime must be in GMT. Note that if society.startTime is not fully specified, a multi-node society can have significant natural-time clock skew across the members. (See class ExecutionTimer)
- org.cougaar.core.blackboard.ActiveSubscriptionObject.deferCommit When set to true, causes
   ActiveSubscriptionObject side effects to occur at LP invocation time rather than immediately during publishAdd
   (See org.cougaar.core.blackboard.ActiveSubscriptionObject.deferCommit in ActiveSubscriptionObject)
- org.cougaar.core.blackboard.Claimable.debug If set to true, every Claimable instance will keep additional
  information for debugging claim conflicts, that is, multiple plugins attempting to operate directly on the same
  blackboard objects. This information adds significant additional memory load. (See class ClaimableImpl)
- org.cougaar.core.blackboard.debug Set to true to additional checking on blackboard transactions. For
  instance, it will attempt to look for changes to blackboard objects which have not been published at transaction
  close time. (See class Subscriber)
- org.cougaar.core.blackboard.enforceTransactions
   Set to false to disable checking for clients of
   BlackboardService publishing changes to the blackboard outside of a transaction. (See class Subscriber)
- org.cougaar.core.blackboard.pedantic When true (the default) enables a variety of extra checks for suspicious blackboard activity. None of these checks are especially expensive, so it is generally recommended that pedantic be left enabled. (See org.cougaar.core.blackboard.Blackboard.PEDANTIC in Blackboard)
- org.cougaar.core.blackboard.timestamp Enable blackboard timestamps, defaults to false. (See class BlackboardTimestampService)
- org.cougaar.core.blackboard.timestamp Set to true to enable EnvelopeMetrics and TimestampSubscriptions (defaults to false). (See class Subscriber)
- org.cougaar.core.blackboard.waitForNewCommChangeNotifications Time in milliseconds to wait for more community changes before asking the community service for them. Default is 1,000. (See class Blackboard)
- org.cougaar.core.domain.config.enable
   Enable the "-Dorg.cougaar.core.domain.config.filename" option to read the LDMDomains.ini file.
   Defaults to true. (See class DomainManager)
- org.cougaar.core.domain.config.filename The domain manager will read the specified ".ini" configuration file (using the config finder) to load domains. See bug 2977. Defaults to LDMDomains.ini. (See class DomainManager)
- org.cougaar.core.load.planning If enabled, the domain manager will load the planning-specific
   PlanningDomain. See bug 2522. Default true (See class DomainManager)
- org.cougaar.core.logging.addAgentPrefix Modify the agent-level LoggingService implementation to add an "agent: " prefix to all logging lines. Options are: "true" to enable in both agents and node-agents, "agent" to only enable on agents, "node" to only enable on the node-agent, "false" to disable. Defaults to true. (See class LoggingServiceComponent)
- org.cougaar.core.logging.trackDuplicateLoggingPrefix Enable debug tracking of duplicate "AgentX:
   AgentX:" LoggingService log messages within the LoggingServiceWithPrefix, possibly due to enabling " Dorg.cougaar.core.logging.addAgentPrefix". Performs an expensive check at DETAIL log level, regardless of
   logger configuration, and logs any duplicate prefixes at SHOUT level. Defaults to false. (See class
   LoggingServiceWithPrefix)
- org.cougaar.core.naming.useSSL Backwards compatibility for the "org.cougaar.core.wp.resolver.rmi.useSSL"

- system property. (See class RMIUtil)
- org.cougaar.core.node.InitializationComponent Which component should be loaded to advertise the ComponentInitializerService, which provides the agent component description configurations. Usually set to XML. (See class AgentManager)
- org.cougaar.core.node.InitializationComponent Used to specify which service component to use. Can be passed in short hand (DB, XML, File) or as a fully specified class:
   org.cougaar.core.node.DBComponentInitializerServiceComponent (See class Node)
- org.cougaar.core.node.SkipReconciliation If enabled, rehydrating agents will not run RestartLPs to do reconciliation with other agents, when the Node starts up. Use this (with caution) to quickly rehydate a society from a consistent set of (quiescent) persistence snapshots. This flag will be cleared once the Node and all its agents have loaded, so that later added agents will do reconciliation. Default false. (See class Topology)
- org.cougaar.core.node.ignoreRehydratedAgentList Ignore the list of agents from the rehydrated state of the NodeAgent, if any. Defaults to false. Set to true to disable this feature and always use the list of agents from the ComponentInitializerService. (See class AgentLoader)
- org.cougaar.core.node.incarnation.period Milliseconds between white pages incarnation polling to detect agent restarts, defaults to 43000. (See class Incarnation)
- org.cougaar.core.persist.rehydrateTest.agent Default RehydrateTest agent name if not specified on the command line (See class RehydrateTest)
- org.cougaar.core.persistence.DataProtectionServiceStubEnabled set to true to enable a debugging implementation of DataProtectionService if no real one is found. (See class PersistenceServiceComponent)
- org.cougaar.core.persistence.archiveCount An integer specifying how may persistence archive snapshots to keep. In the absence of a value for this property, the archivingDisabled property is used to set this value to 0 for disabled and Integer.MAX\_VALUE for enabled. (See class PersistenceServiceComponent)
- org.cougaar.core.persistence.archivingDisabled Set true to discard archival deltas. Overridden by org.cougaar.core.persistence.archiveCount. (See class PersistenceServiceComponent)
- org.cougaar.core.persistence.class Specify the persistence classes to be used (if persistence is enabled). The
  value consists of one or more elements separated by commas, where element specifies a persistence class name
  and zero or more semi-colon-separated parameters for that class. For example, the default persistence class is:

   Dorg.cougaar.core.persist.class=org.cougaar.core.persist.FilePersistence\;P

Here is another example:

- -Dorg.cougaar.core.persist.class=org.cougaar.core.persist.DummyPersistence\;dummy Multiple classes can be specified with the "," separator, e.g.:
- -Dorg.cougaar.core.persist.class=Alpha\;a1\;a2\;a3,Beta\;b1\;b2 where class Alpha is passed [a1, a2, a3] and Beta is passed [b1, b2].

The interpretation of the parameters depends on the persistence class, so see the documentation of the individual plugin classes for details. (See class PersistenceServiceComponent)

- org.cougaar.core.persistence.clear Set true to discard all deltas on startup (See class PersistenceServiceComponent)
- org.cougaar.core.persistence.consolidationPeriod The number of incremental deltas between full deltas (default = 10) (See class PersistenceServiceComponent)
- org.cougaar.core.persistence.database.driver Specify the database driver to use for DatabasePersistence.
   (See class DatabasePersistence)
- org.cougaar.core.persistence.database.password Specify the database password to use for

- DatabasePersistence. (See class DatabasePersistence)
- org.cougaar.core.persistence.database.url Specify the database to use for DatabasePersistence. (See class DatabasePersistence)
- org.cougaar.core.persistence.database.user Specify the database user to use for DatabasePersistence. (See class DatabasePersistence)
- org.cougaar.core.persistence.enable When set to true will enable blackboard persistence. (See class Blackboard)
- org.cougaar.core.persistence.lazyInterval specifies the interval in milliseconds between the generation of persistence deltas. Default is 300000 (5 minutes). This will be overridden if the persistence control and adaptivity engines are running. (See class PersistenceServiceComponent)
- org.cougaar.core.persistence.path Specifies the directory in which persistence snapshots should be saved. If
  this is a relative path, it the base will be the value or org.cougaar.install.path. This property is not used if the plugin
  is configured with a specific parameter specifying the location of the persistence root. (See class
  BufferedFilePersistence)
- **org.cougaar.core.persistence.path** Specifies the directory in which persistence snapshots should be saved. If this is a relative path, it the base will be the value or org.cougaar.install.path. This property is not used if the plugin is configured with a specific parameter specifying the location of the persistence root. (See class FilePersistence)
- **org.cougaar.core.persistence.path** Specifies the directory in which persistence snapshots should be saved. If this is a relative path, it the base will be the value or org.cougaar.install.path. This property is not used if the plugin is configured with a specific parameter specifying the location of the persistence root. (See class FilePersistenceBase)
- org.cougaar.core.service.SuicideService.enable If true, will enable suicide of Nodes and Agents. Otherwise, the suicide API exists but only logs attempts rather than actually kills anything. The default is false. (See class SuicideService)
- org.cougaar.core.service.SuicideService.lowMem Specify a quantity of memory to use as the definition of "dangerously low" for proactive kill situations. This is interpreted as a factor of Runtime.maxMemory(). The default value is "0.02" meaning 2 percent. If this value is greater than or equal to 1.0, then it is interpreted as a number of kilobytes. Examples: if maxMemory is 100Mb, then "0.005" and "512" are both interpreted as one half a megabyte. (See class SuicideService)
- org.cougaar.core.service.SuicideService.proactive If true, the SuicideService will attempt to kill things
  proactively when it notices low-memory situations. Defaults to true, but only takes effect if the SuicideService is
  enabled. (See class SuicideService)
- org.cougaar.core.service.SuicideService.proactivePeriod Defines the period of proactive suicide checks, in seconds. By default, this is 1. (See class SuicideService)
- org.cougaar.core.society.startTime The real date-time stamp when the society was started. If supplied, can
  be used to synchronize the execution times of nodes which were started at different real times. society.startTime
  must be in GMT and ought to be generally slightly in the past. Format example: "09/12/2003 13:00:00" (See
  class ExecutionTimer)
- org.cougaar.core.society.timeOffset Specify an offset (in milliseconds) from real time to use as execution time. This is an alternative to using agent.startTime and society.startTime (if timeOffset is specified, then these other properties are ignored). Typical usage would be to specify the execution-time offset when (re)starting a node to match the other nodes in the society. (See class ExecutionTimer)
- org.cougaar.core.wp.bootstrap.ensurelsFound.checkMtsReachability Specify if MTS-reachability should

be tested when checking WP server names. Set to true by default. Should never be set to false (see bug 3907). (See class EnsurelsFoundManager)

- org.cougaar.core.wp.bootstrap.ensurelsFound.checkNamesPeriod Specify how often to check for WP server names. Set to 45 seconds by default. (See class EnsurelsFoundManager)
- org.cougaar.core.wp.resolver.rmi.resolveHosts Boolean-valued property to do an InetAddress resolution of the bootstrap entry's host name when using the RMI registry. For example, if the bootstrap entry was:

```
(NodeX, -RMI_REG, rmi://localhost:8000/NodeX)
```

then this would resolve "localhost" to "127.0.0.1" and act as if the bootstrap entry was:

```
(NodeX, -RMI_REG, rmi://127.0.0.1:8000/NodeX)
```

RMI registry access is fairly picky about the host name, so this defaults to 'true'. (See class RMIUtil)

- org.cougaar.core.wp.resolver.rmi.useSSL Boolean-valued property which controls whether or not ssl is used in communication to the RMI registry. Defaults to 'false'. (See class RMIUtil)
- org.cougaar.core.wp.resolver.transport.checkDeadlinesPeriod Time in milliseconds between checks for message timeouts if there are any outstanding messages. Defaults to 10000. (See class ClientTransport)
- org.cougaar.core.wp.resolver.transport.graceMillis Extended message timeout deadline after startup.
   Defaults to zero. (See class ClientTransport)
- org.cougaar.core.wp.resolver.transport.nagleMillis Delay in milliseconds before sending messages, to improve batching. Defaults to zero. (See class ClientTransport)
- org.cougaar.core.wp.resolver.transport.noListNagle Ignore the "nagleMillis" delay if the request is a new name list (e.g. "list ."), which is often a user request. Defaults to false. (See class ClientTransport)
- org.cougaar.experiment.id The experiment identifier for running this Node; see org.cougaar.filename for details.
   (See class Node)
- org.cougaar.filename The file name (.ini) for starting this Node, which defaults to
   (org.cougaar.node.name+".ini") if both org.cougaar.filename and org.cougaar.experiment.id are not specified. If
   this property is specified then org.cougaar.experiment.id must not be specified. (See class Node)
- **org.cougaar.install.path** Used by FilePersistence as the parent directory for persistence snapshots when there is no directory specified in configuration parameters and org.cougaar.core.persistence.path is a relative pathname. This property is not used if the plugin is configured with a specific parameter specifying the location of the persistence root. (See class BufferedFilePersistence)
- org.cougaar.install.path Used by FilePersistence as the parent directory for persistence snapshots when there
  is no directory specified in configuration parameters and org.cougaar.core.persistence.path is a relative
  pathname. This property is not used if the plugin is configured with a specific parameter specifying the location of
  the persistence root. (See class FilePersistence)
- org.cougaar.install.path Used by FilePersistence as the parent directory for persistence snapshots when there
  is no directory specified in configuration parameters and org.cougaar.core.persistence.path is a relative
  pathname. This property is not used if the plugin is configured with a specific parameter specifying the location of
  the persistence root. (See class FilePersistenceBase)
- org.cougaar.install.path Used to find keystore as "org.cougaar.install.path/configs/common/.keystore" (See

class KeyRing)

- org.cougaar.install.path The base path for finding jar and configuration files. (See class Node)
- org.cougaar.node.name org.cougaar.experiment.id CSMART database experiment identifier (See class DBComponentInitializerServiceComponent)
- org.cougaar.node.name The (required) name for this Node. (See class Node)
- **org.cougaar.node.name** The name for this Node. (See class XMLConfigParser)
- org.cougaar.node.validate Same as "-Dorg.cougaar.society.xml.validate" (See class XMLConfigParser)
- org.cougaar.security.certificate The path of the org.cougaar.install.path for finding the org.cougaar.validate.jars certificates. (See class Node)
- org.cougaar.security.keystore The URL of the cougaar keystore. (See class KeyRing)
- org.cougaar.security.keystore.password The password to the cougaar keystore. (See class KeyRing)
- org.cougaar.society.file The name of the XML file from which to read this Node's definition (See class XMLComponentInitializerServiceProvider)
- org.cougaar.society.xml.validate Indicates if the XML parser should be validating or not. Defaults to "false".
   (See class XMLConfigParser)
- org.cougaar.society.xsl.checkXML Check for an XSL stylesheet, e.g.: <?xml-stylesheet type="text/xml" href="society.xsl"?> Defaults to "true". (See class XMLConfigParser)
- org.cougaar.society.xsl.default.file Default XSL stylesheet if "-Dorg.cougaar.society.xsl.checkXML" is false or an xml-stylesheet is not found. Defaults to null. (See class XMLConfigParser)
- org.cougaar.society.xsl.dynamic.file Dynamic XSL stylesheet that generates the XSL stylesheet based upon
  the XML file contents, unless an XSL stylesheet is specified in the XML file (-Dorg.cougaar.society.xsl.checkXML)
  or specified (-Dorg.cougaar.society.xsl.default.file). Defaults to "make\_society.xsl". (See class XMLConfigParser)
- org.cougaar.society.xsl.param.\* XSL parameters passed to the xml-stylesheet or default XSL stylesheet, where the above system property prefix is removed. For example, if a system property is: Dorg.cougaar.society.xsl.param.foo=bar then the parameter "foo=bar" will be passed to the XSL file's optional parameter: <xsl:param name="foo">my\_default</xsl:param> (See class XMLConfigParser)
- org.cougaar.thread.running.max specifies the maximum number of running threads. A negative number is interpreted to mean that there is no maximum. The precise meaning of 'maximum' is varies by scheduler class. (See class Scheduler)
- org.cougaar.thread.targets Specifies a file which contains percentage targets for the children. (See class PercentageLoadSelector)
- org.cougaar.validate.jars If true, will check the certificates on the (org.cougaar.install.path+"/plugin/\*.jar") files.
   Defaults to false. (See class Node)