

# JES 2.0 System Properties

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## JES System Properties

Java applications use system properties instead of environment variables to gather system information, because environment variables are platform dependent. The Java interpreter (the `java` command used to run an application) uses a standard list of system properties that you can find in most Java programming guides.

JES 2.0 also defines system properties that you can use when starting the JES framework. You can set system properties in several different ways:

- When you run the `runjes` script:  

```
runjes -j -Dcom.sun.jes.service.http.minHandlers=0
```
- At the JES framework command prompt:  

```
> set com.sun.jes.service.http.minHandlers=0
```
- When you start JES from the command line with the `java` command:  

```
java -Dcom.sun.jes.service.http.minHandlers=2  
-jar framework.jar
```

You can also get the current value of a system property from the JES framework command line, like this:

- ```
> get com.sun.jes.service.http.minHandlers
```

The JES 2.0 system properties and their allowed values are listed in TABLE A-1.

TABLE A-1 System Properties You Can Set for JES 2.0

| Service | Property Name                                     | Description and Value                                                                                                                                                                                                             |
|---------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HTTP    | <code>com.sun.jes.service.http.hostname</code>    | The host name used in the URL of a registered servlet or resource. If you do not specify a value, the default is the host on which JES is running. If that host is multi-homed, the HTTP service accepts connections on any host. |
|         | <code>com.sun.jes.service.http.port</code>        | The port number used in the URL of a registered servlet or resource. Default values are <b>8080</b> for HTTP and <b>443</b> for HTTPS.                                                                                            |
|         | <code>com.sun.jes.service.http.minHandlers</code> | An integer specifying the minimum number of handlers the HTTP service uses. Default value is <b>0</b> .                                                                                                                           |

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|      |                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <code>com.sun.jes.service.http.maxHandlers</code>                 | An integer specifying the maximum number of handlers the HTTP service uses. Default value is <b>4</b> .                                                                                                                                                                                                                                                                                                                                                         |
|      | <code>com.sun.jes.service.http.use.log.service</code>             | A Boolean value that indicates whether messages are displayed on <b>stderr</b> or sent to the log. The only valid value is <b>true</b> . If the value is <b>true</b> and the log service is registered, the JES HTTP service directs exception messages to the log. If the value is <b>true</b> and the log service is not registered, messages are displayed on <b>stderr</b> . By default, the value is not set and messages are displayed on <b>stderr</b> . |
| SSL  | <code>com.sun.jes.service.ssl.isSupported</code>                  | A Boolean value that determines whether your JES installation enables Secure Sockets Layer (SSL) connections. If the value is <b>false</b> , the SSL service starts but doesn't do anything. Default value is <b>true</b> .                                                                                                                                                                                                                                     |
|      | <code>com.sun.jes.impl.keystore.store</code>                      | An URL indicating where to get keystore contents for the SSL service's keystore. When you start JES, the <b>runjes</b> script sets this property to the example keystore file <b>lib/tlscerts</b> . If the value is empty or incorrect, the SSL service fails. No default value.                                                                                                                                                                                |
|      | <code>com.sun.jes.impl.keystore.access</code>                     | An encoded password for the example keystore <b>lib/tlscerts</b> . If the value is empty or incorrect, the SSL service fails. To set the password, you must use the JDK <b>keytool</b> to change it in the keystore, then the JES <b>bin/encodepw</b> script to encode it and add it to this property. No default value.                                                                                                                                        |
| User | <code>com.sun.jes.service.http.auth.users.defaultAdminName</code> | The login name for the default administrator of the User Management bundle. If you set the administrator name without setting the password (below), the password is the same as the administrator name. This property is only used once, when the <b>httpusers</b> bundle is started, and it cannot be used by other bundles. Default value is <b>admin</b> .                                                                                                   |

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|        |                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | <code>com.sun.jes.service.http.auth.users.defaultAdminPassword</code> | The password for the default administrator of the User Management bundle. This property is only used once, when the <b>httpusers</b> bundle is started, and it cannot be used by other bundles. Default value is <b>admin</b> .                                                                                                                                                                               |
|        | <code>com.sun.jes.service.http.auth.users.defaultUserName</code>      | The login name for the default user of the User Management bundle. If you set the user name without setting a password (below), the password has the same value as the name. This property is only used once, when the <b>httpusers</b> bundle is started, and it cannot be used by other bundles. Default value is <b>guest</b> .                                                                            |
|        | <code>com.sun.jes.service.http.auth.users.defaultUserPassword</code>  | The password for the default user of the User Management bundle. This property is only used once, when the <b>httpusers</b> bundle is started, and it cannot be accessed by other bundles. Default value is <b>guest</b> .                                                                                                                                                                                    |
| Log    | <code>com.sun.jes.service.log.size</code>                             | An integer specifying the number of entries in the JES log. Minimum value is 1, maximum is <b>100000</b> , default is <b>20</b> .                                                                                                                                                                                                                                                                             |
|        | <code>com.sun.jes.service.log.threshold</code>                        | The level at or below which entries are added to the log. The allowed values are: <ul style="list-style-type: none"> <li>• <b>1</b> for an error message</li> <li>• <b>2</b> for a warning message</li> <li>• <b>3</b> for an informational message</li> <li>• <b>4</b> for a debugging message.</li> </ul> <p>Default value is <b>4</b>, meaning that entries with a log level of 4 or below are logged.</p> |
| Device | <code>com.sun.jes.device.debug</code>                                 | A value that activates the debugging mode for device access and displays messages to output. To turn on debugging, use the value <b>on</b> . Any other value turns debugging off. No default value.                                                                                                                                                                                                           |

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|           |                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | <code>com.sun.jes.driverlocator.servletURL</code>       | The URL of the JES <b>FindDriverServlet</b> servlet on the Web server where device drivers are located. <b>FindDriverServlet</b> finds and loads device drivers from the Web server. No default value.                                                                                                                                                                                                                                                                                                                                                                                |
| Framework | <code>com.sun.jes.framework.filesystem.available</code> | A Boolean value specifying whether a local filesystem is available for the JES framework to use. If set to false, the local disk cache and the <b>jescache</b> directory are disabled. Support for platforms not having a filesystem will be added in a future release. Default value is <b>true</b> .                                                                                                                                                                                                                                                                                |
|           | <code>com.sun.jes.framework.cache.dir</code>            | The pathname to the cache directory, set in the Java system property <b>user.home</b> . Default value is the directory <b>jescache</b> in your home directory (for Solaris) or on your default drive (for Windows).                                                                                                                                                                                                                                                                                                                                                                   |
|           | <code>com.sun.jes.framework.debug</code>                | <p>A comma-separated list of the following options:</p> <ul style="list-style-type: none"> <li>• <b>help</b> - prints messages about debug options</li> <li>• <b>all</b> - turns on all debugging</li> <li>• <b>bcl</b> - turns on debugging for bundle classloading</li> <li>• <b>event</b> - turns on debugging for event handling</li> <li>• <b>fw</b> - turns on debugging for the framework</li> <li>• <b>filter</b> - LDAP filter parsing and evaluation</li> </ul> <p>Examples:<br/> <b>com.sun.jes.framework.debug=all</b><br/> <b>com.sun.jes.framework.debug=bcl,fw</b></p> |
|           | <code>com.sun.jes.framework.bundles.baseurl</code>      | An URL of any type that points to the location of bundles. This property is ignored when the URL starts with <code>./</code> or <code>.\</code> . Default value is <b>file:/currentDirectory</b> .                                                                                                                                                                                                                                                                                                                                                                                    |

TABLE A-1 System Properties You Can Set for JES 2.0

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|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>com.sun.jes.framework.exception.trace</code>    | If <b>true</b> , the exception stack trace (including that of a nested <b>BundleException</b> ) is displayed. If <b>false</b> , just the exception name and message (including those of a nested <b>BundleException</b> ) are displayed. Default value is <b>true</b> . |
| <code>com.sun.jes.framework.max.open.jar</code>       | An integer specifying the maximum number of bundle JAR files that can be kept open in memory. Default value is <b>4</b> .                                                                                                                                               |
| <code>com.sun.jes.framework.events.synchronous</code> | A flag indicating whether events are delivered synchronously. If <b>true</b> , all events are delivered synchronously; if <b>false</b> , only <b>ServiceEvent</b> events are. Default value is <b>false</b> .                                                           |

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