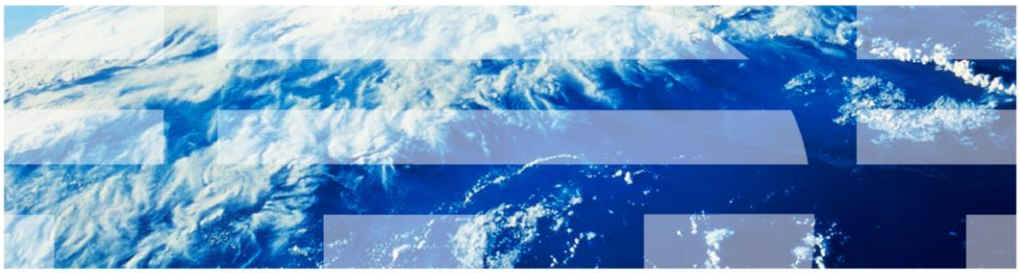
Maximo Asset Management V7.1

Maximo log types



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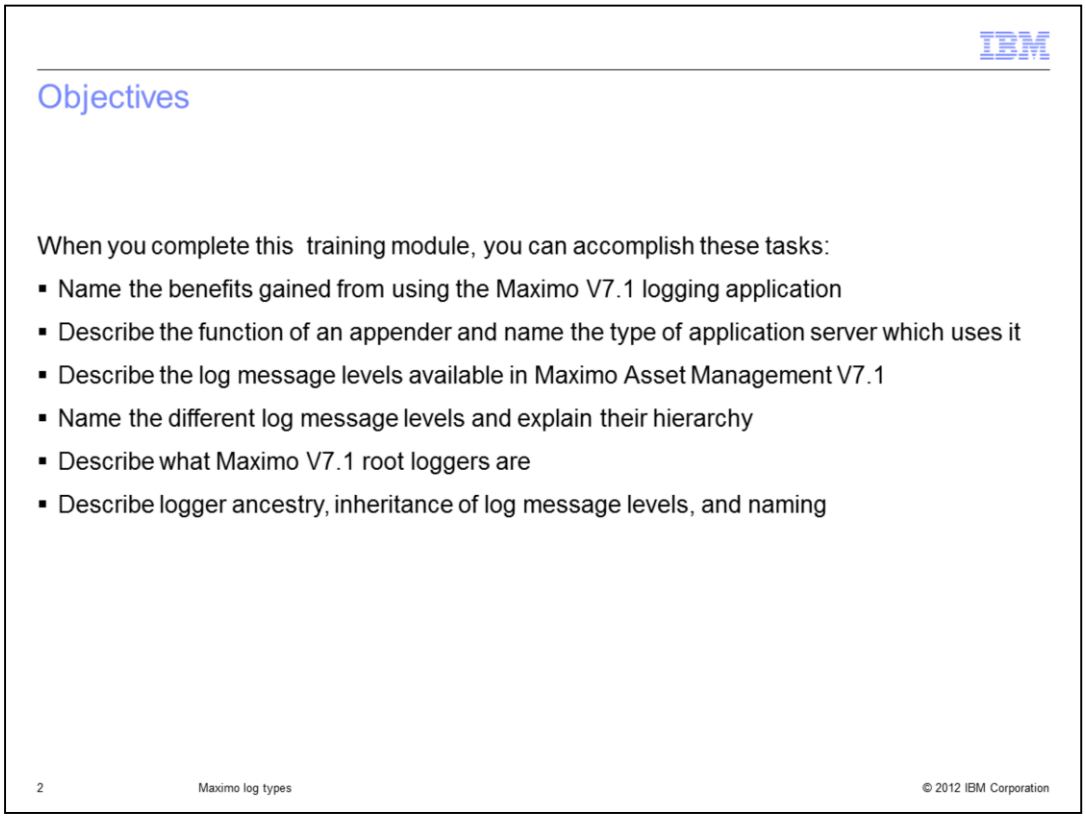
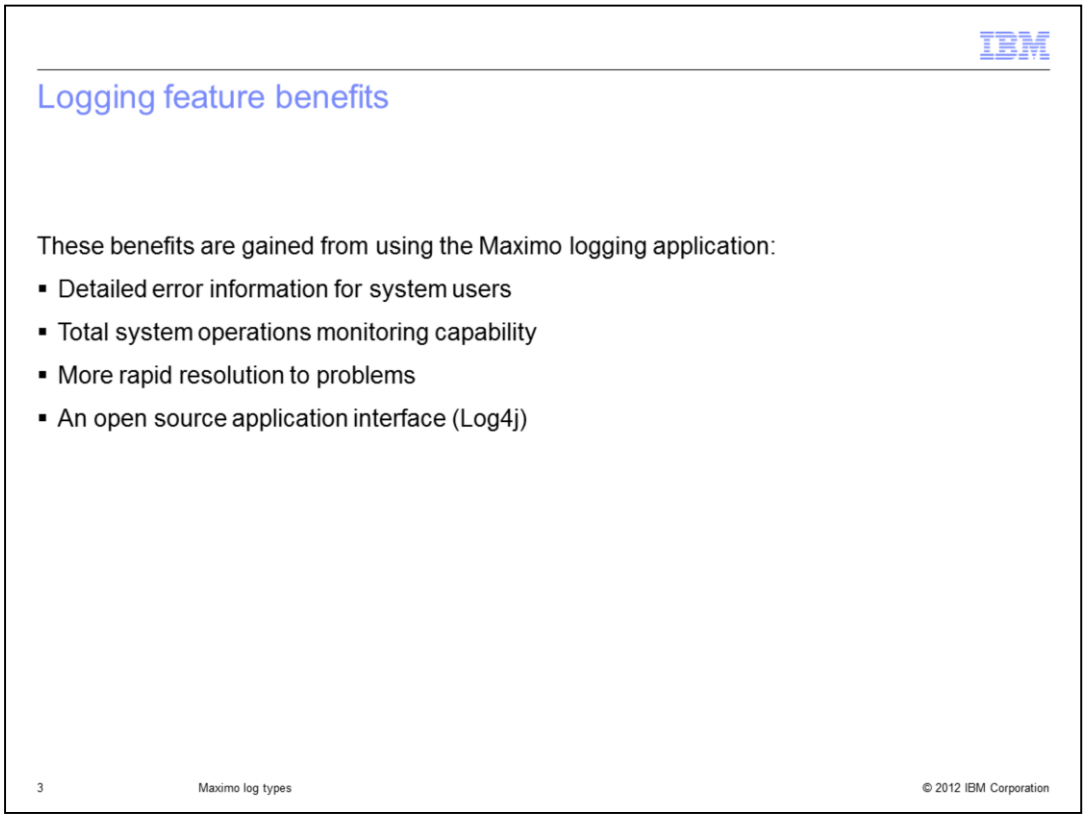
This Maximo® training module introduces system users to Maximo Asset Management V7.1 log message levels, root logger types, logger message level inheritance, appenders, and the open source Log4j application interface.

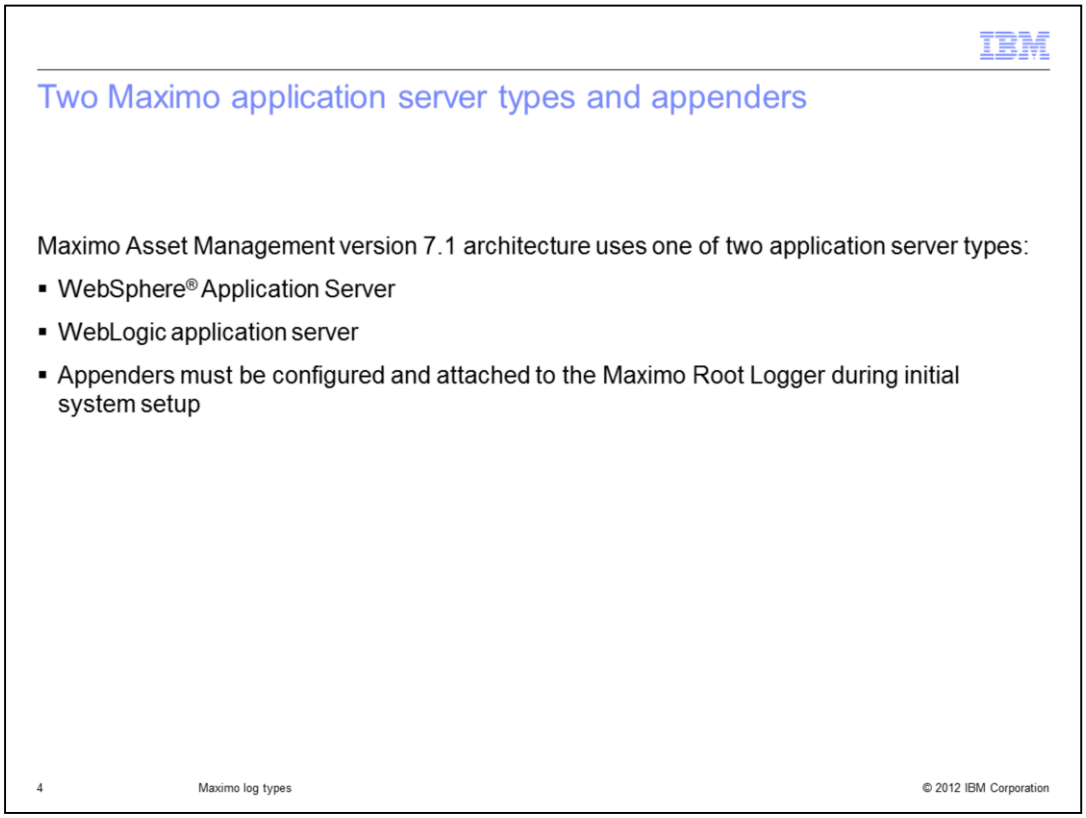


When you complete this training module, you can perform these tasks:

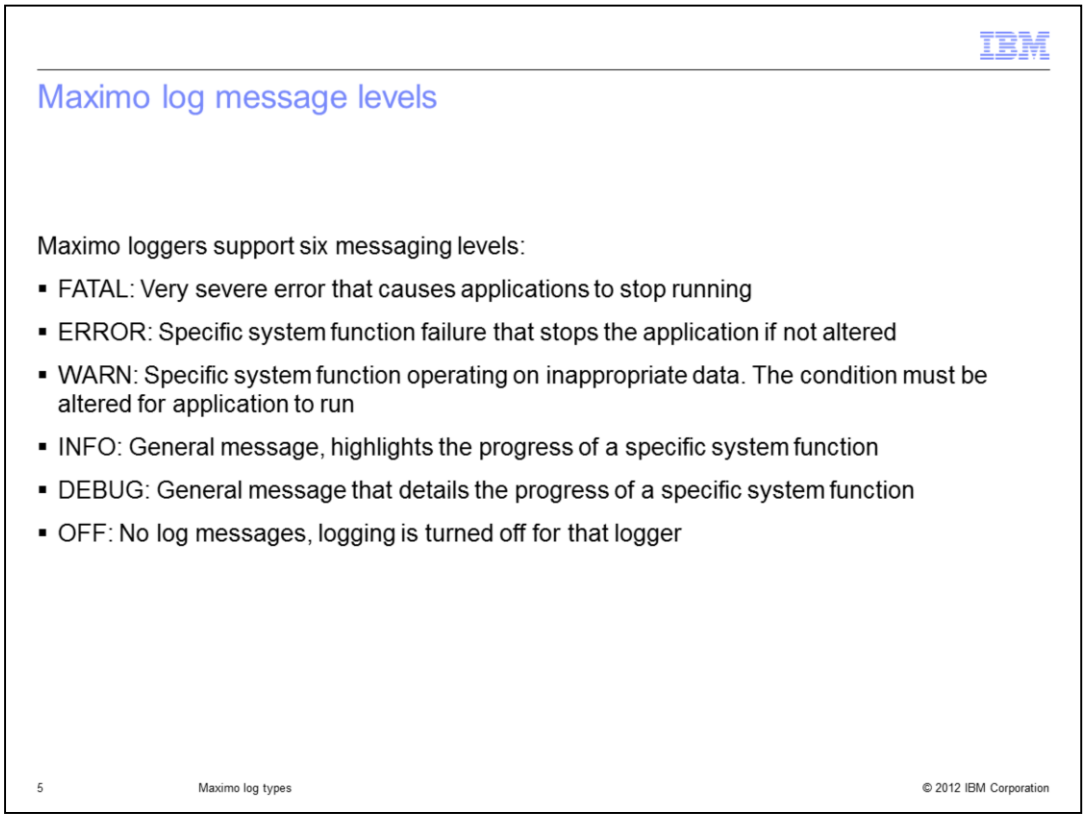
- Name the benefits gained from using the Maximo V7.1 logging application
- Name the two types of application servers used in Maximo Asset Management V7.1
- Describe the function of an appender
- Describe the log message levels available in Maximo Asset Management V7.1
- Name the different log message levels and explain their hierarchy
- Describe what Maximo V7.1 root loggers are
- Describe logger ancestry, inheritance of log message levels, and logger naming



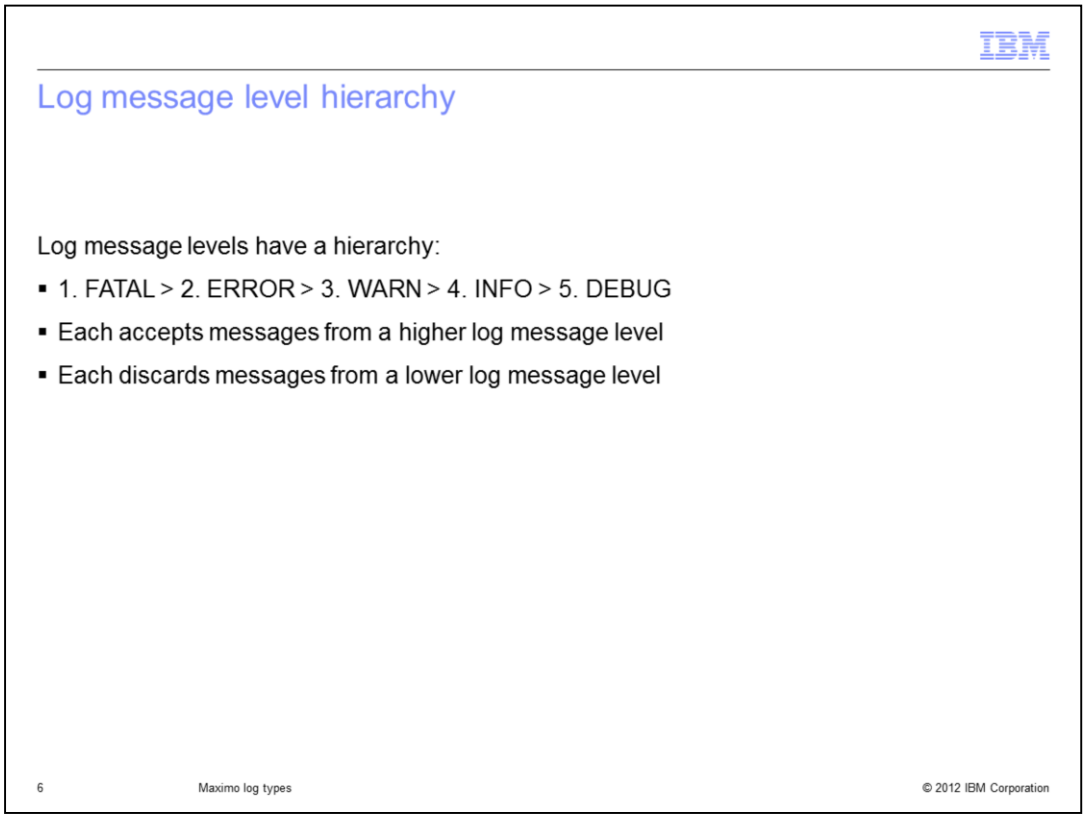
Maximo logging provides system users with detailed error information. Many benefits are gained from using the Maximo logging application. The benefits include total system operations monitoring and rapid problem resolution. Maximo Asset Management versions 6.2 and 7.1 use the open source Log4j API. Log4j was developed by the Apache Software Foundation as part of the Apache Jakarta Project.



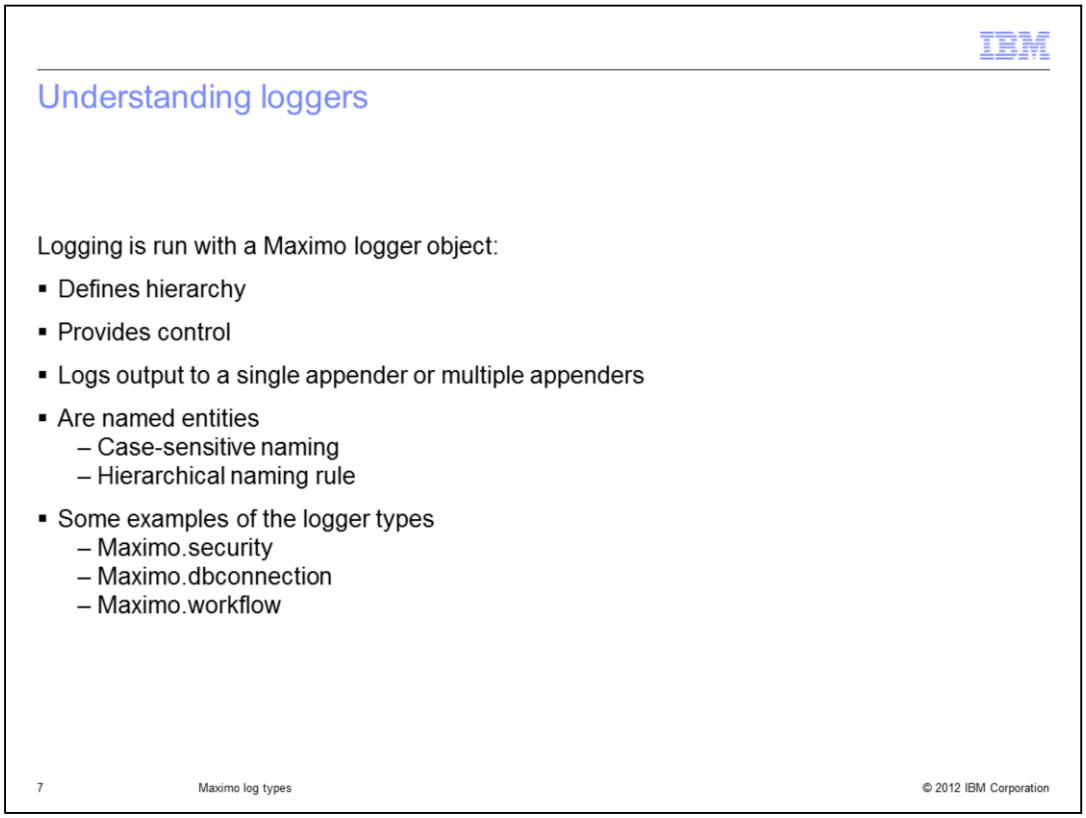
Maximo V7.1 uses either the WebSphere or the WebLogic application server. The document Enabling Logging and Appenders to Log Application Events (https://www-304.ibm.com/support/docview.wss?uid=swg21446599) contains instructions for attaching appenders to the Maximo Root Logger. This configuration task must be performed during the initial system setup.



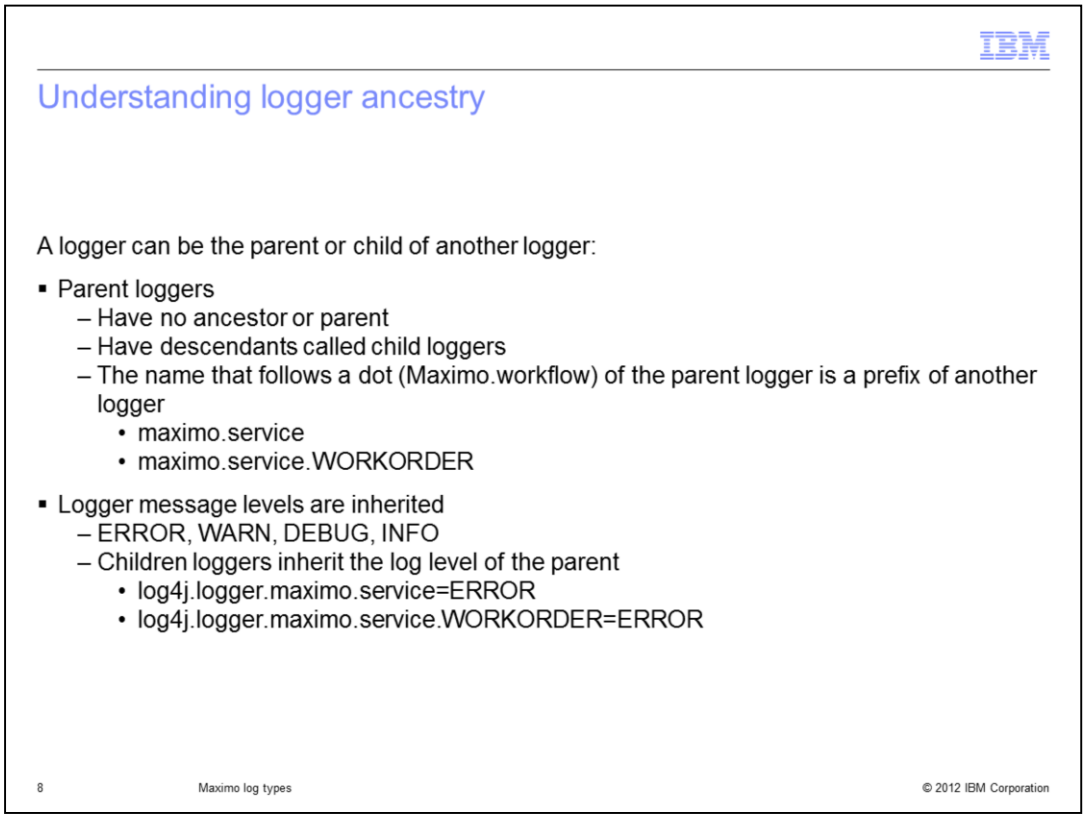
Maximo loggers support these six log message levels: FATAL, ERROR, WARN, INFO, DEBUG, and OFF. A FATAL message level error is very severe and causes the application to stop running. When an ERROR message level event has occurred, a specific functionality has failed that stops the application if it is not fixed. Getting a WARN message level event means that a functionality of Maximo is operating on inappropriate data. The warning condition must be fixed so the Maximo application runs properly. INFO messages highlight the progress of a specific functionality, while DEBUG messages give detailed information on the progress of a specific functionality. Setting the log message level for a specific logger to OFF shuts the logger down and turns off all its messaging. The default log message level for Maximo Asset Management version 7.1 is ERROR.



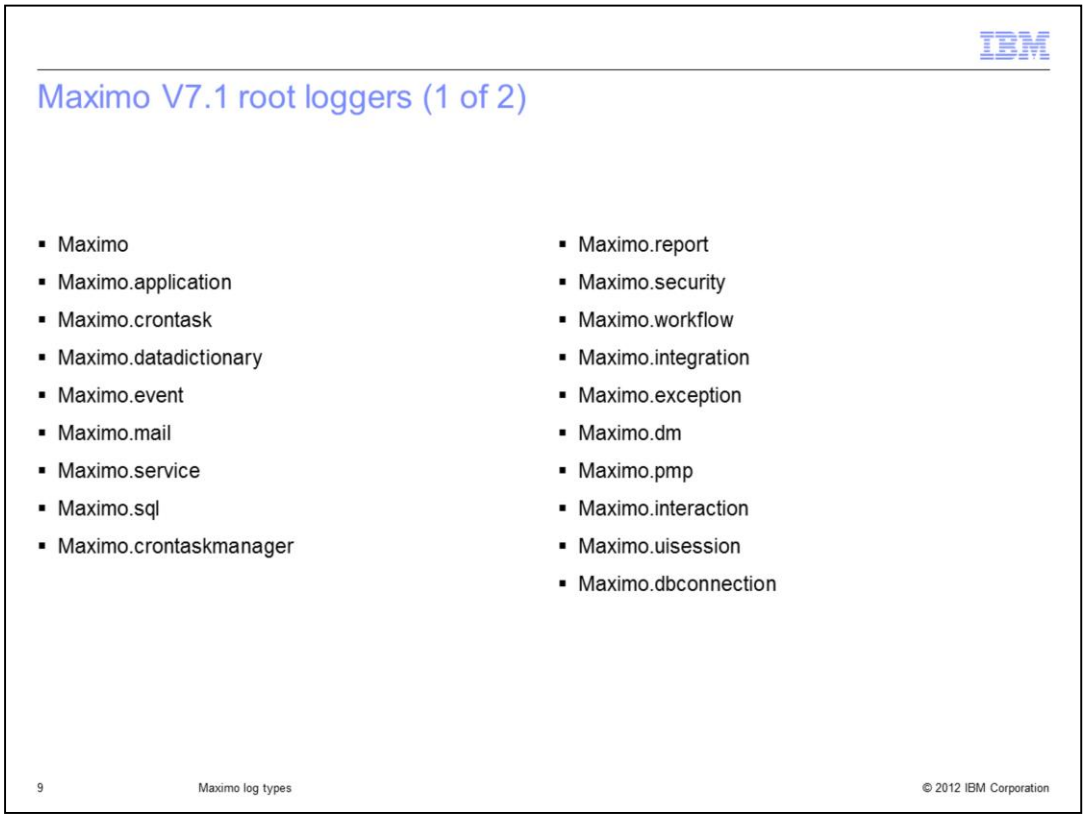
Log message levels have a hierarchy that goes from FATAL (highest) on down to DEBUG (lowest). DEBUG messages contain very detailed information. For that reason the DEBUG message level is not set by default, and is not used during the production run of the system. DEBUG is used for troubleshooting purposes only.



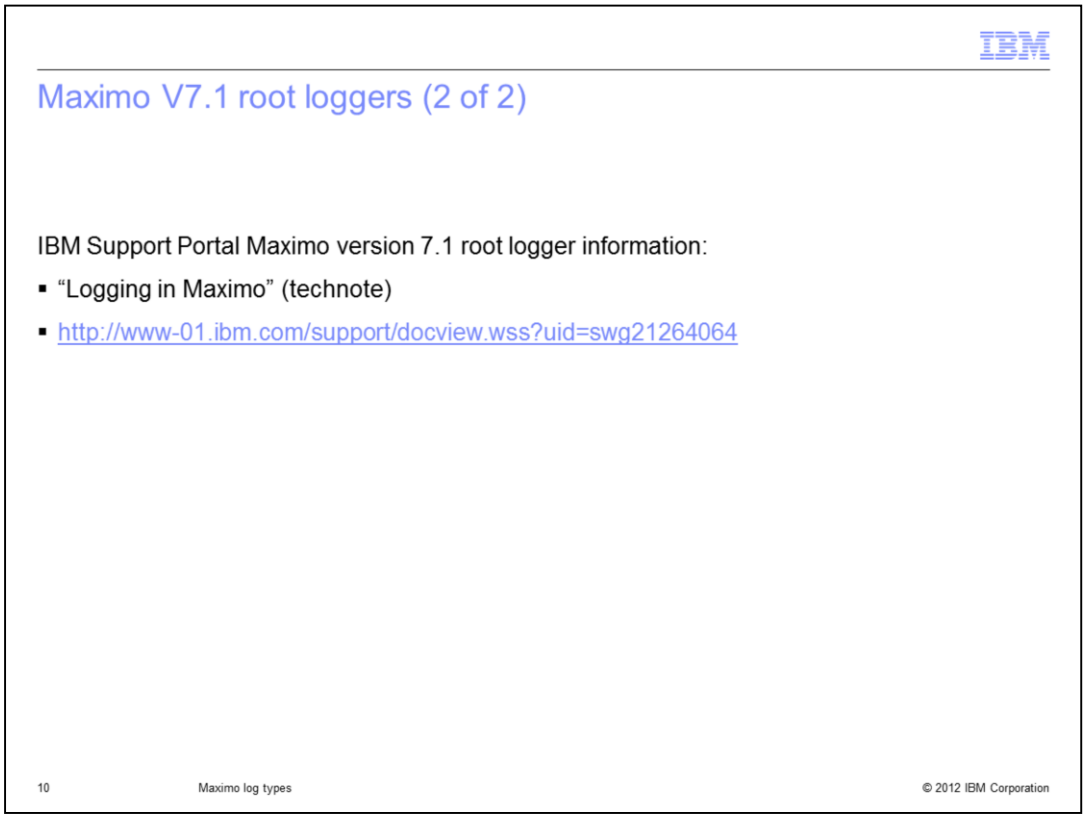
Maximo Asset Management versions 6.2 and 7.1 use loggers. A logger is an object that performs a specific type of logging. There are many types of loggers that come with Maximo Asset Management version 7.1. Maximo.security (security events), Maximo.dbconnection (database connection events), Maximo.workflow (workflow events) and all other Maximo Asset Management V7.1 loggers are introduced in this training module.



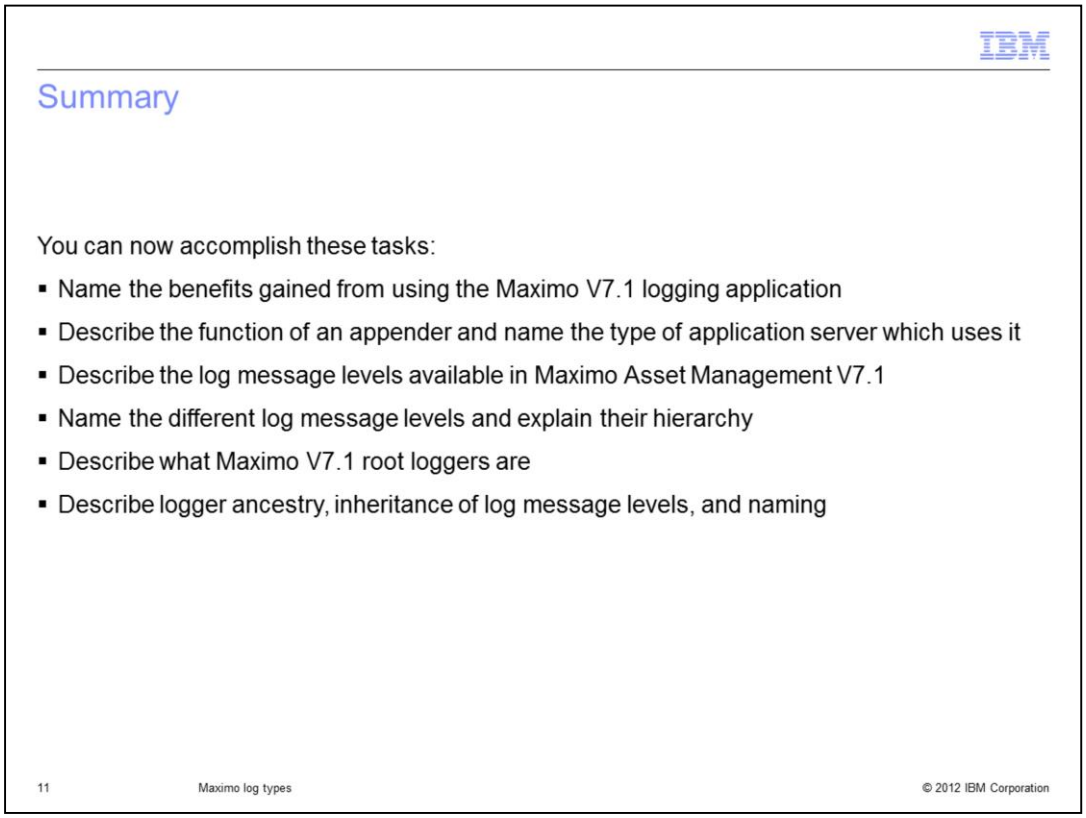
A logger can either be the parent of another logger or the child of another logger. You can tell this by the naming of the logger. Child loggers have the same naming as the parent, but also contain an added name. The maximo.service logger has a child named maximo.service.WORKORDER. Child loggers inherit the log message level of the parent. The log4j.logger.maximo.service.WORKORDER logger inherits the ERROR message level from the setting of the log4j.logger.maximo.service logger.



Listed here are nineteen types of root loggers available in Maximo Asset Management V7.1.



A description of each logger type can be found in the technote entitled “Logging in Maximo” located on the IBM Support Portal. The web address is http://www-01.ibm.com/support/docview.wss?uid=swg21264064.



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