SAP Composite Application Framework

Creating Application Logs

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Type Style	Represents
Example Text	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options.
	Cross-references to other documentation.
Example text	Emphasized words or phrases in body text, graphic titles, and table titles.
EXAMPLE TEXT	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
`Example text`	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
`Example text`	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
`<Example text>`	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
`EXAMPLE TEXT`	Keys on the keyboard, for example, F2 or ENTER.

Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

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Requirements and Dependencies

Before you start with this tutorial you should have installed the following Software:

- SAP Web Application Server Java 7.0
- SAP NetWeaver Developer Studio 7.0

This tutorial is based on the following How-to Guides:

- Create a local Entity Service with maintenance UI

Additionally you should have configured CAF as described in the How-to Guide “Installation and Configuration Guide”.

Applicable Releases

This tutorial is compatible with the following releases:

- SAP NetWeaver ’04s
- SAP Composite Application Framework (CAF) 7.0

Disclaimer

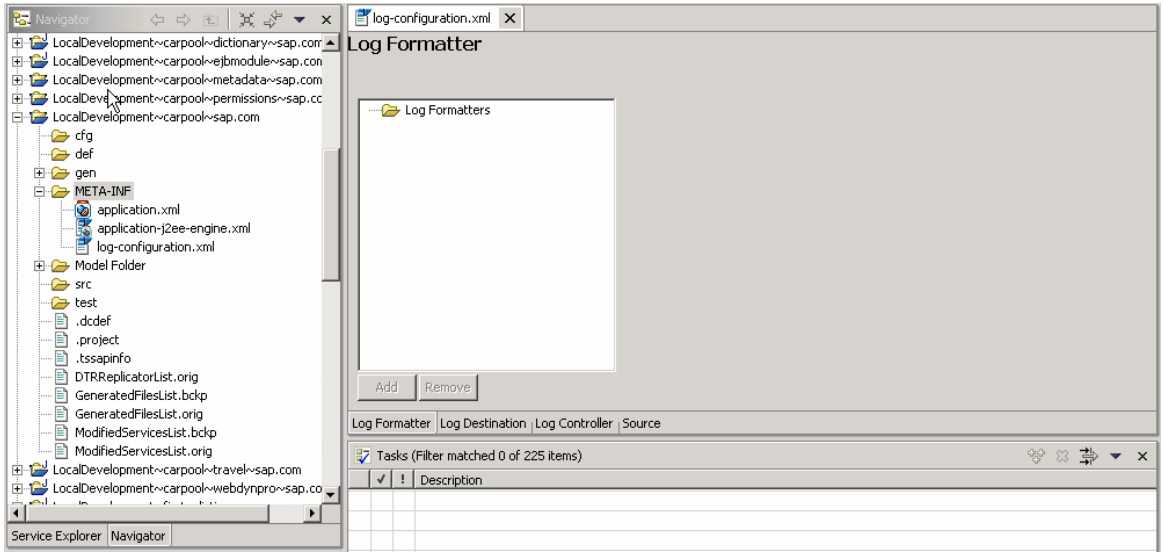
Any software coding and/or code lines / strings ("Code") included in this documentation are only examples and are not intended to be used in a productive system environment. The Code is only intended better explain and visualize the syntax and phrasing rules of certain coding. SAP does not warrant the correctness and completeness of the Code given herein, and SAP shall not be liable for errors or damages caused by the usage of the Code, except if such damages were caused by SAP intentionally or grossly negligent.

Creating Application Specific Logs

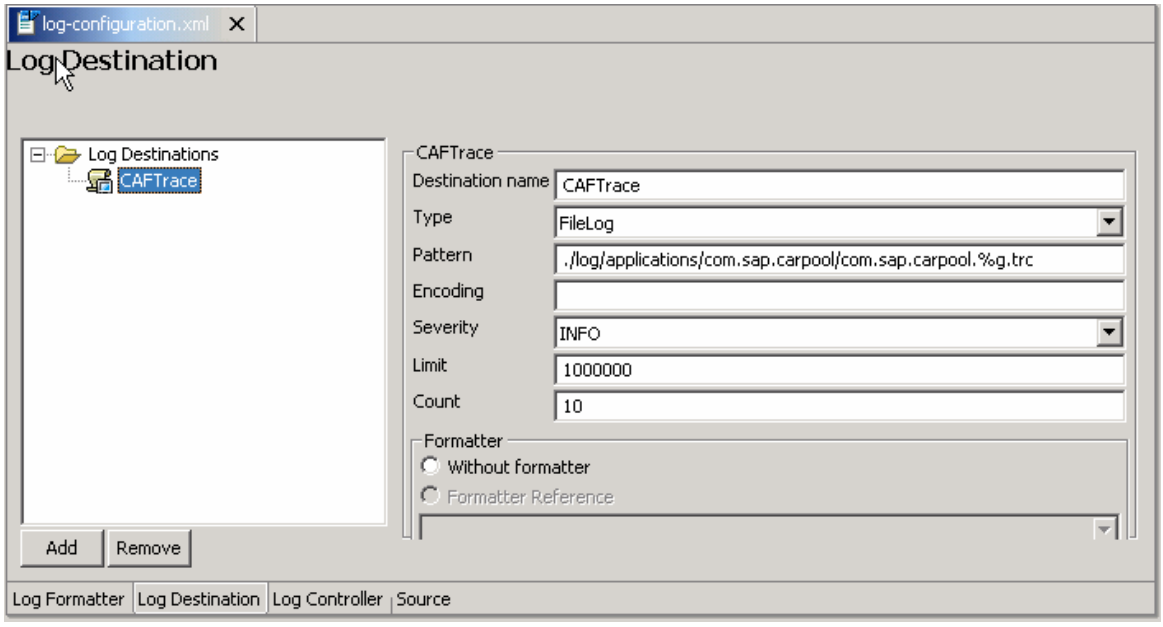
By default all the logs are written to the *./log/defaultTrace.trc* .(As per the settings of LogManager Service). However individual applications can override this by defining a file called log-configuration.xml. This file defines Log Destinations, Log Controllers and Log Formatters, for the classes in the Applications.

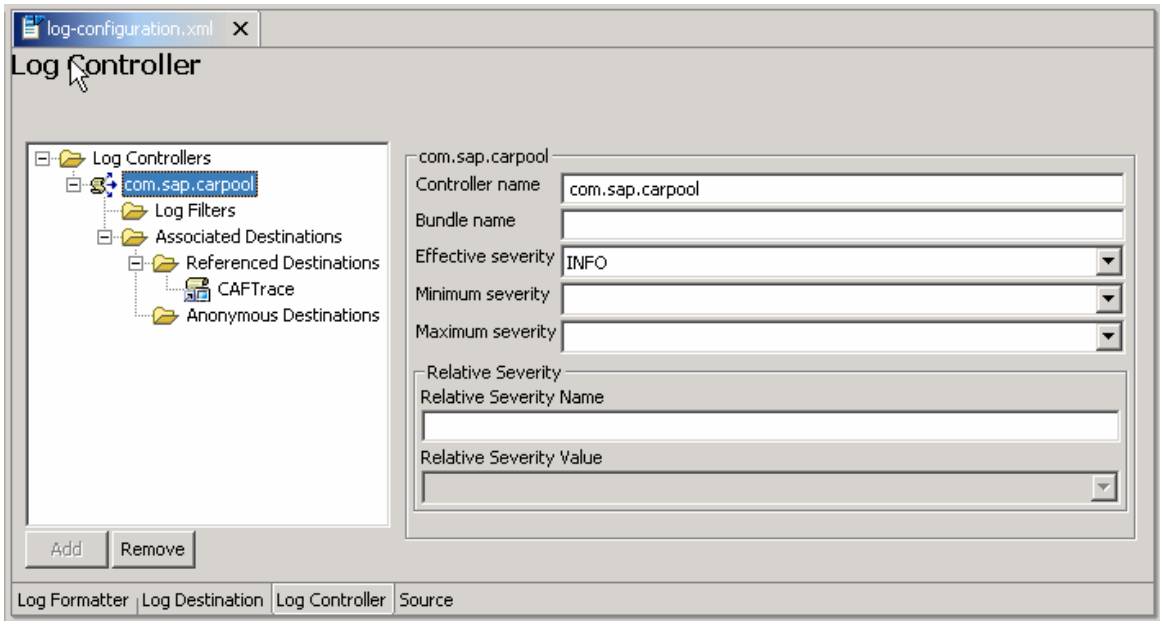
In the following section we will discuss how application specific logs can be created for CAF applications.

When you create a CAF project, by default a log-configuration.xml file is created. To view this file, open the CAF project, switch to the Navigator view. Navigate to LocalDevelopment~carpool~sap.com -> META-INF -> log-configuration.xml



Switch to the Log Destination and Log Controller tabs to see the predefined destinations and controllers.





The current settings mean that the logs from all the classes under the package com.sap.carpool have to be written to the file ./log/applications/com.sap.carpool/com.sap.carpool.%g.trc

where %g is the file roll-over count.

All the Entity and Application Services created have an object of *com.sap.tc.logging.Location* created in them. This is the logger object and you can invoke different methods of this object to write to the log files.

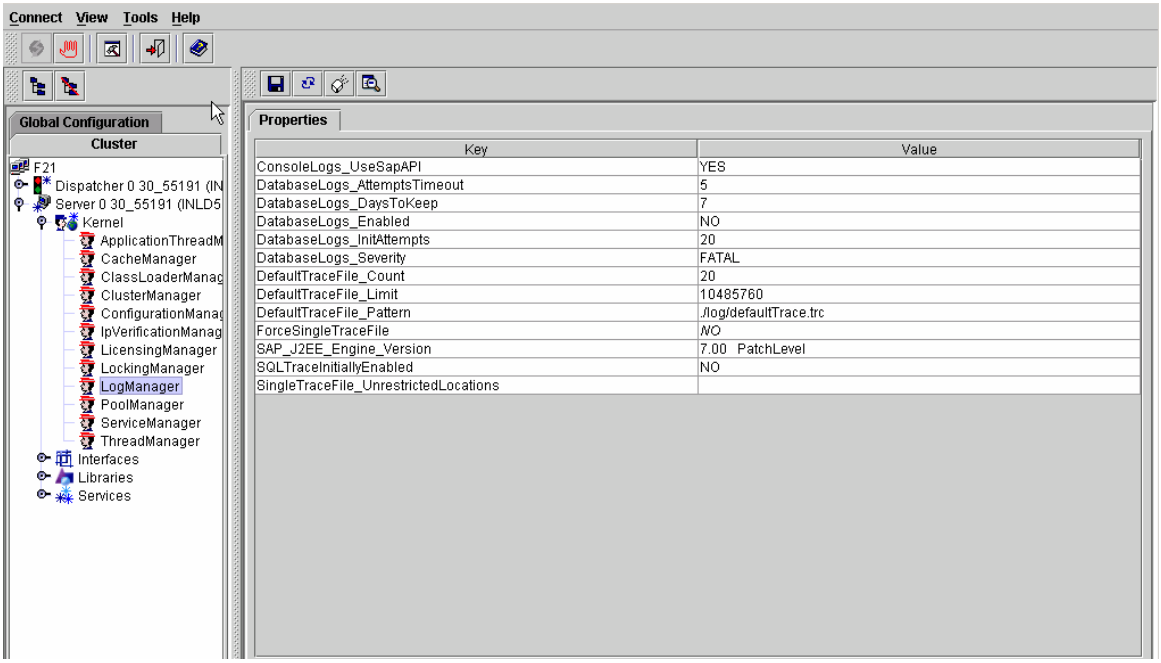
For example the *TravelLocationAppBean* will have the following statements:

```
private static final com.sap.tc.logging.Location location =
com.sap.tc.logging.Location.getLocation(TravelLocationAppBean.class);
```

The *com.sap.tc.logging.Location* class has the following methods to write to log files. You can use these methods in your program based on the severity of the message to be logged.

a) *logT(int, java.lang.String)*
b) *debugT(java.lang.String)*
c) *errorT(java.lang.String)*
d) *fatalT(java.lang.String)*
e) *infoT(java.lang.String)*
f) *pathT(java.lang.String)*
g) *warningT(java.lang.String)*

If the setting *ForceSingleTraceFile* is enabled in the J2EE server, all the logs will be written to the default trace file and not to the application specific files. To enable this, launch the *Visual Admin* and open the *Log Manager*.



Change the entry *ForceSingleTraceFile* to *NO.* Save and restart the Server.

Now let us see how we can define our own log configuration so as to have separate logs for each Entity and Application Services.

1) Open the IDE. Switch to the *CAS Perspective*. In the *Navigator* pane, open the file log-configuration.xml.

Switch to the Log Destinations tab. Add a new Destination with the following settings.

Destination Name: TravelLocationApp

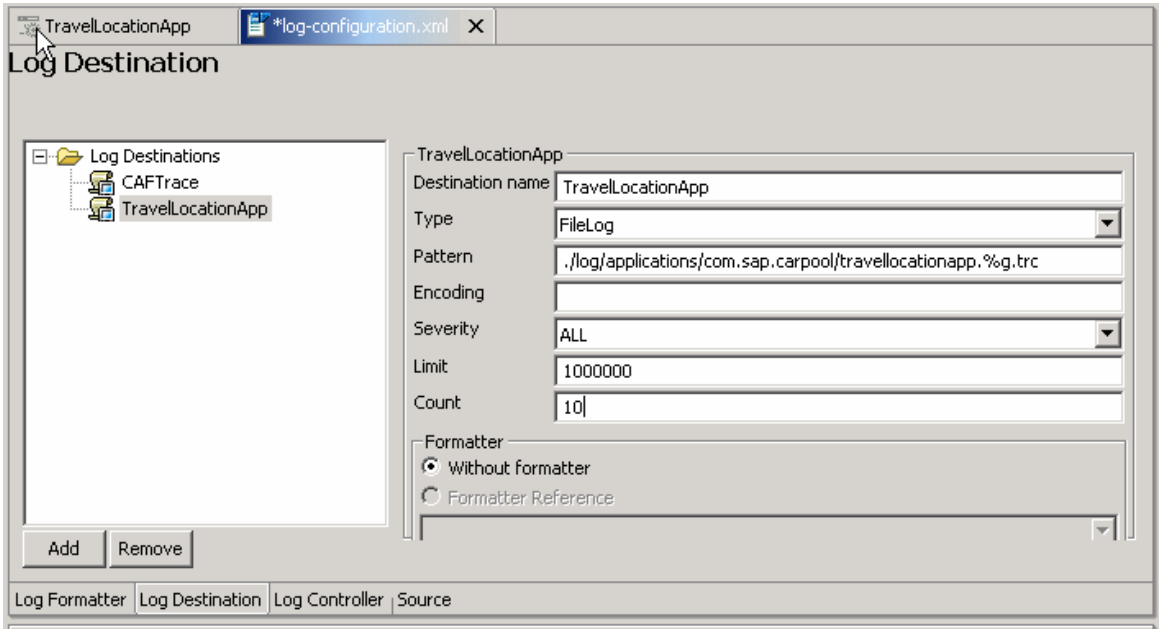
Type: FileLog

Pattern: ./log/applications/com.sap.carpool/travellocationapp.%g.trc

Severity: ALL

Limit: 1000000

Count: 10.



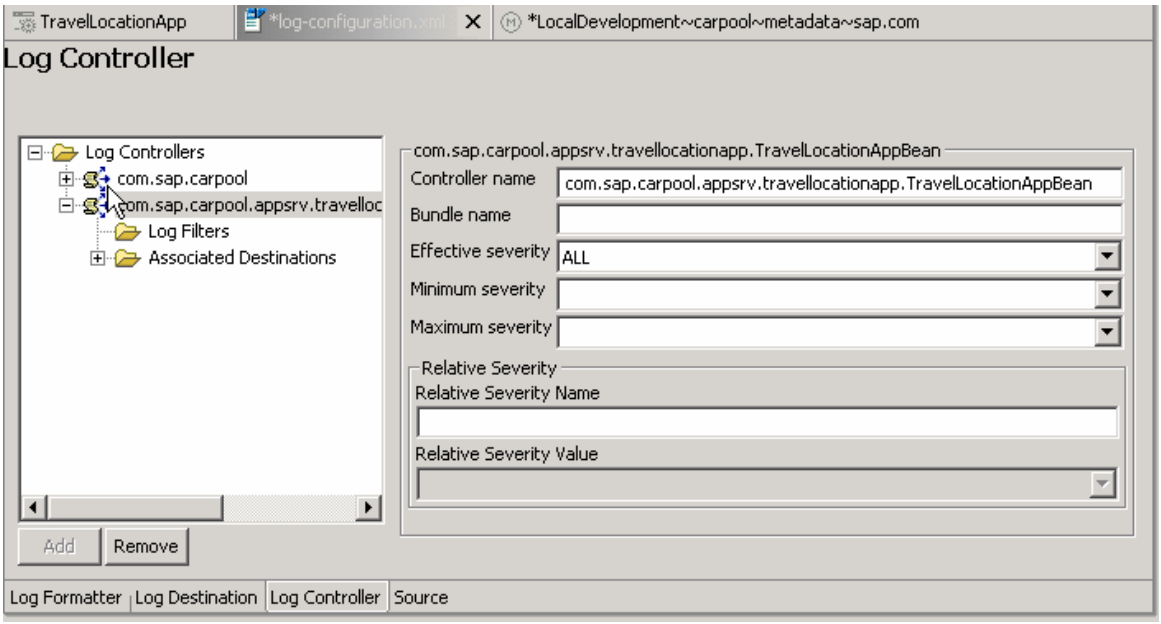
Save the Metadata.

2) Switch to the Log Controller Tab.

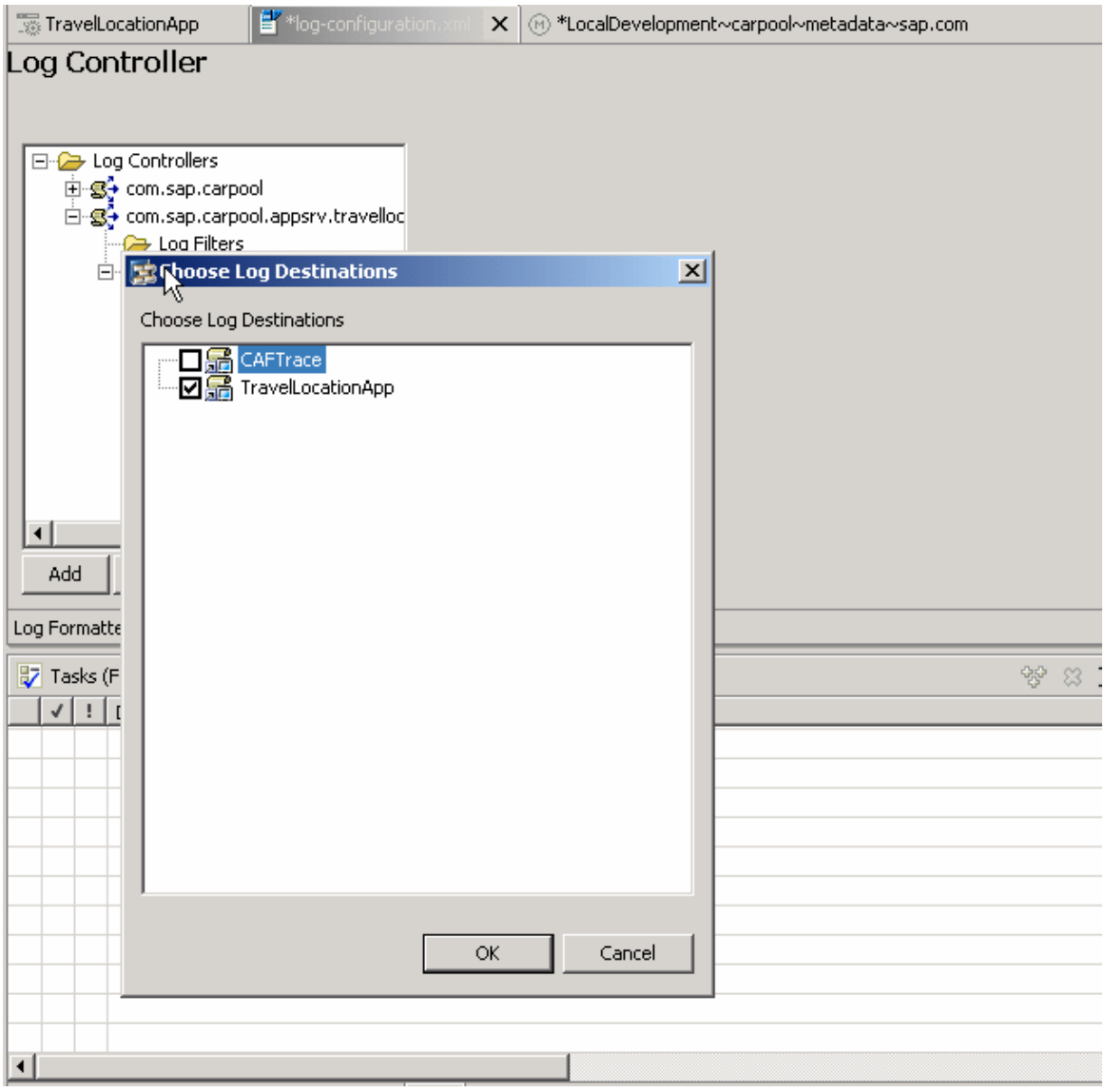
Add a new controller with the following settings:

Controller Name: com.sap.carpool.appsrv.travellocationapp.TravelLocationAppBean

Effective Severity: ALL



Expand the tree to *Associated Destinations -> Referenced Destinations*. Add a new Referenced Destination *TravelLocationApp*.



Save all metadata. Build, deploy and test the UI pattern carpool_TravelLocationCreate. Now all the logs from the TravelLocationAppBean will be written into the new Log Destination.

The same approach can be used for Entity Services too. You just need to create the Log Controllers with the same name as that of the Entity Services beans, with appropriate Log Destinations.

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