

M6-CAL 100.002.1

AutoPilot[®] M6 Plug-in for Calendar Integration Installation and User's Guide

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TITLE: AUTOPILOT M6 PLUG-IN FOR CALENDAR INTEGRATION INSTALLATION AND USER'S GUIDE

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Chapter 1: Introduction

Welcome to the *Nastel AutoPilot M6 Calendar Integration Plugin User's Guide*. This guide explains how to deploy and use of the Calendar Plugin. Please review this guide carefully before using the product. Nastel AutoPilot M6 Calendar Integration Plugin will hereinafter be identified as the Calendar Plugin.

1.1 How this Guide is Organized

<u>Chapter 1:</u>	Introductory information about this document.
<u>Chapter 2:</u>	Provides instructions for new installations of the Calendar Plugin.
Chapter 3:	Explains how to deploy and use the Calendar Plugin.
<u>Appendix A:</u>	Detailed list of all reference information.
<u>Appendix B:</u>	Conventions used in Nastel documentation.
<u>Glossary:</u>	Listing of unique and common acronyms, words and definitions.

1.2 History of this Document

Table 1-1. Document History						
Release Date	Document Number	Version	Summary			
April 2013	M6-CAL 100.001	1.0	Initial release			
August 2017	M6-CAL 100.002	1.0	Update Nastel's phone numbers and street address			
May 2022	M6-CAL 100.002.1	1.0	Changed title to AutoPilot M6 Plug- in for Calendar Integration Installation and User's Guide			

1.2.1 User Feedback

Nastel encourages all users of M6-WMQ to submit comments, suggestions, corrections and recommendations for improvement for all M6-WMQ documentation. Please send your comments to support@nastel.com. You will receive a written response, along with status of any proposed change, update, or correction.

1.3 Related Documents

Complete listings of documents related to AutoPilot M6 can be found in <u>Appendix A</u>.

1.4 Release Notes

See README.HTM file on installation media and root installation directory.

1.5 Intended Audience

This document is intended for personnel installing and using AutoPilot M6 Calendar Integration Plugin. The installer should be familiar with:

- AutoPilot M6 V6.5
- Target operating system environment
- The installer may need administrative privileges for the target platform.

1.6 Terms and Abbreviations

A list of terms and abbreviations used in this document is located in the Glossary.

1.7 Technical Support

If you need additional technical support, you can contact Nastel by telephone or e-mail. To contact Nastel technical support by telephone, call **800-963-9822 ext. 1**, if you are calling from outside the United States dial **001-516-801-2100**. To contact Nastel technical support by e-mail, send a message to <u>support@nastel.com</u>. You can also contact Nastel support via the support website. Contact your AutoPilot M6 Administrator for access information. To access the Nastel automated support system (user ID and Password are required) go to: <u>http://support.nastel.com/</u>. Contact your local AutoPilot M6 Administrator for further information.

1.8 Conventions

Refer to <u>Appendix B</u> for conventions used in this guide.

Chapter 2: Installation

This chapter provides instructions for a typical installation and setup requirements for the AutoPilot M6 Calendar Integration Plugin.

2.1 Before Installation

2.1.1 Technical Documents

Prior to installation you should review all text files and installation procedures. You should print, as needed, all of the installation-related materials to give yourself quick access to any required information during any installation or migration procedures. Additional sets of printed documents are available from your Nastel representative or Nastel Support.

2.1.2 Installation Recommendations

Nastel recommends that you observe the following update sequence when updating AutoPilot with patches, updates, and service packs:

- Machines running the Domain Server
- Machines running the managed nodes.

2.1.3 Licensing

A copy of the standard Licensing Agreement is imbedded in the installation software and is provided on the <u>Nastel Resource Center</u>. The formal licensing agreement has been furnished in the purchase agreement package.

2.1.4 Download

Download the Calendar Plug-in, AP_GOOGLE_CAL-<version_number>.pkg (for example, AP_GOOGLE_CAL-1.0.4.pkg), from the <u>Nastel Resource Center</u>, or copy from your installation media.

2.2 Installing the Plug-in

2.2.1 Installing from a Command Prompt

- 1. Save your work and log off AutoPilot M6.
- 2. Stop the managed nodes and/or Domain Servers that will be updated as specified in the *AutoPilot M6 User's Guide*.
- 3. Copy **AP_GOOGLE_CAL-<version_number>.pkg** into the [AUTOPILOT_HOME] \updates directory.
- 4. Navigate to the [AUTOPILOT_HOME] \bin directory.

5. At the command prompt run:

[AUTOPILOT_HOME] \bin \pkgman .. \updates \ AP_GOOGLE_CAL -<version_number>.pkg

C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601] Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\cmiska>D:\nastel\AutoPilotM6\bin\pkgman\updates\AP_GOOGLE_CAL-1.0.4.pkg Loading properties from file="D:\nastel\AutoPilotM6\global.properties", filter=× Loaded properties from file="D:\nastel\AutoPilotM6\global.properties", filter=×, elapsed.ms=10 Loading Logging log4j.config=D:\nastel\AutoPilotM6\log4j.properties, exists=true AutoPilot M6 Package Manager Version 6.0 Copyright (C) 1998-2012 Nastel All rights reserved.
Loaded 7 packages from "packages.xml" Installing package "AP_GOOGLE_CAL-1.0.4.pkg" Checking installed packages Installing "GOOGLE-CAL-Plugin 1.0.4" Brstalling libs from pkg Backing up "lib/google-cal-plugin.jar", mimetype=application/octet-stream Creating "lib/commons-lang3-3.1.jar", mimetype=application/octet-stream Creating "lib/commons-lang3-3.1.jar", mimetype=application/octet-stream Creating "lib/jersey-client-1.16.jar", mimetype=application/octet-stream Creating "lib/jersey-client-1.16.jar", mimetype=application/octet-stream Creating "lib/jersey-client-1.16.jar", mimetype=application/octet-stream Creating "lib/jersey-creation Creating "lib/jersey-creation Creating "lib/jersey-creation Creating "lib/jersey-creation Creating "lib/jersey-creation Creating "lib/jersey-creation Creating "lib/jackson-core-2.1.1.jar", mimetype=application/octet-stream Creating "lib/jackson-core-2.1.1.jar", mimetype=application/octet-stream Creating "lib/jackson-annotations-2.1.1.jar", mimetype=application/octet-stream Creating "lib/jackson-annotations-2.1.1.jar", mimetype=application/octet-stream Creating "lib/jackson-databind-2.1.1.jar", mimetype=application/octet-stream Creating "lib/jackson-databi
C:\Users\cmiska>

Figure 2-1. File Path Input Screen

6. Verify plug-in installation by running the command:

[AUTOPILOT_HOME] \bin\pkgman -info.

The details of the Package Manager are listed. Verify GOOGLE-CAL-Plugin (AP_GOOGLE_CAL-<version_number>.pkg) is listed. Make sure there are no errors posted at the bottom of the screen.

C:\Windows\system32\cmd.exe			
"GOOGLE-CAL-Plugin 1.0.4" installed.			
C:\Users\cmiska>D:\nastel\AutoPilotM6\bin	Nakazza -i		
Loading properties from file="D:\nastel\/			perties", filterax
Loaded properties from file="D:\nastel\Au			
Loading Logging log4j.config=D:\nastel\A		log4j.prope	rties, exists=true
AutoPilot M6 Package Manager Version 6.0			
Copyright (C) 1998-2012 Nastel All right	ts reserved		
Loaded 8 packages from "packages.xml"			
couded o packages from packages.xmr			
Package	Version	Size(KB)	Time
AutoPilot M6(NA)	6.0	NA	2013-04-11 09:59:36
JRE(NA)	1.6.0_16	NA	2012-01-17 14:27:58
AIM-Plugin(NA)	6.0.20	69	2010-04-07 10:42:29
ServiceUpdate(AP60_SU18.pkg)	6.0.18	4267	2013-03-18 15:43:05
Core-GEF(AP_CORE_GEF=2.3.2.pkg)	2.3.2	420	2013-03-18 14:32:56
TIBCO-RU-Plugin(AP_TIB_RU-2.4.8.pkg)	2.4.8	215	2012-11-12 14:22:01
SOLACE-Plugin(AP_SOLACE-2.4.0.pkg)	2.4.0	1933	2012-11-13 13:48:45
GOOGLE-CAL-Plugin(AP_GOOGLE_CAL-1.0.4.pk	1.0.4	1906	2013-04-11 09:59:36
C:\Users\cmiska>_			

Figure 2-2. Verify Installation Screen

7. Verify that the jar files have been copied into the lib directory. In this example change directory to lib then run the dir command.

C:\Windows\system32\cm	d.exe	
D:\nastel\AutoPilotH6\li		
Volume in drive D has n Volume Serial Number is		
Directory of D:\nastel\	AutoPilotM6\lib	
	<dir> .</dir>	
04/11/2013 09:43 AM	<dir> 0.lockfile</dir>	
07/26/2012 01:39 PM 03/18/2013 03:42 PM	80,312 activation.jar 112,429 aimplg.jar	
03/18/2013 02:32 PM 03/18/2013 03:43 PM	49,925 ap-core-gef.jar 1,100,795 atpgui.jar	
03/18/2013 03:43 PH 03/18/2013 03:43 PH	23,088 boot.jar 41,391 bspol.jar	
07/26/2012 01:39 PH 07/26/2012 01:39 PH	193,952 com.ibm.mq.jar 32,912 com.ibm.mqprop.jar	
07/26/2012 01:39 PM 08/27/2010 10:39 AM	46,725 commons-codec-1.3.jar 575,389 commons-collections-3.2.1.jar	
07/26/2012 01:39 PM 11/13/2012 02:48 PM	305,001 commons-httpclient-3.1.jar 261,809 commons-lang-2.4.jar	
03/18/2013 02:33 PM 07/26/2012 01:39 PM	315,805 commons-lang3-3.1.jar 38,015 commons-logging-1.0.4.jar	
09/22/2010 09:18 AM 03/18/2013 03:43 PM	100,193 commons-pool-1.5.5.jar 12,743 core.jar	
07/26/2012 01:39 PM 07/26/2012 01:39 PM	1,230,904 db2jaua.zip 663,346 db2jcc.jar	
	<dir> delete 143,161 freetds_jdbc.jar</dir>	
07/26/2012 01:39 PM	23,153 gnu-regexp-1.0.8.jar	
03/18/2013 02:33 PM 07/26/2012 01:39 PM	40.185 google°cal-plugin.jar 167.223 grammatica-1.4.jar 171.947 hsql.jar	
07/26/2012 01:39 PM 07/26/2012 01:39 PM	604,048 ifxjdbc.jar	
07/26/2012 01:39 PH 07/26/2012 01:39 PM	1,128,531 ifxlang.jar 1,138,572 itext.jar	
03/18/2013 02:33 PM 03/18/2013 02:33 PM	34,477 jackson-annotations-2.1.1.jar	
03/18/2013 02:33 PH 11/12/2012 03:20 PH	206,379 jackson-core-2.1.1.jar 922,643 jackson-databind-2.1.1.jar 104,554 jack-api.jar	
11/12/2012 03:20 PH 11/12/2012 03:20 PH	3,104,199 jaxb-xjc.jar	
11/12/2012 03:20 PH 07/26/2012 01:39 PM	980,264 jaxb1-imp1.jar 28.408 jcalendarbutton.jar	
07/26/2012 01:39 PM 07/26/2012 01:39 PM	1,143,910 jcchart451k.jar 309,293 jcommon.jar	
03/18/2013 02:33 PH 03/18/2013 02:33 PH	130,904 jersey-cĺient-1.16.jar	
07/26/2012 01:39 PM 07/26/2012 01:39 PM	1,425,825 jfreechart.jar 168,651 jgraph.jar	
07/26/2012 01:39 PM 09/22/2010 09:22 AM	46,512 jmxer.jar 948,100 jna.jar	
07/26/2012 01:39 PM 11/13/2012 02:48 PM	75,918 jndi.jar 26,396 jsr173_api.jar	
07/26/2012 01:39 PM	302,284 jtds.jar	
07/26/2012 01:39 PM	6,900 license_key.jar	
03/18/2013 03:43 PH 03/18/2013 03:42 PH	18,676 licmgr.jar 481,534 log4j.jar	
03/18/2013 03:42 PM 07/26/2012 01:39 PM	494,975 mail.jar 767,492 mysql-connector.jar	
03/18/2013 03:43 PM 03/18/2013 03:43 PM	7,786 n4j.jar 6,050 nastel-rss.jar	
03/18/2013 03:43 PM	<pre></pre>	
03/18/2013 03:43 PM 03/18/2013 03:43 PM	113,388 nmx.jar 2,157 nmxcore.jar	
	1,352,918 ojdbc14.jar <dir> old</dir>	
07/26/2012 01:39 PM 04/11/2013 09:59 AM	21,110 pop3.jar <dir> replace</dir>	
01/17/2012 03:27 PM 07/26/2012 01:39 PM	<dir> old 21,110 pop3.jar</dir>	
04/11/2013 09:59 AM 07/26/2012 01:39 PM	<dir> replace 73,762 rssutils.jar</dir>	
11/12/2012 03:22 PM 03/18/2013 03:42 PM	173,781 ruconfig_nastel.jar 44,558 signpost-core.jar	
07/26/2012 01:39 PM 07/26/2012 01:39 PM	326,636 sjøxp.jar 334,839 skinlf.jar	
07/26/2012 01:39 PM 03/18/2013 03:43 PM	24,029 smtp.jar 361,586 snmpbase.jar	
07/26/2012 01:39 PM 11/13/2012 02:48 PM	42,203 snmpi.jar 170,962 sol-common-5.0.1.4.jar	
11/13/2012 02:48 PM 11/13/2012 02:48 PM	1,103,760 sol-jcsmp-5.0.1.4.jar 621,058 solace-plugin.jar	
07/26/2012 01:39 PM	68,594 swingmiglayout.jar 195,968 syslag4j.jar	
11/12/2012 03:22 PM	64,669 tib-ru-plugin.jar	
08/08/2011 06:30 PM 07/26/2012 01:39 PM	132,711 tibruj.jar 132,472 xml.jar	
03/18/2013 02:32 PH 79 File(s)		
	571,221,843,968 bytes free	
D:\nastel\AutoPilotM6\li	07	

Figure 2-3. Verify JAR Files

You should see the following jar files listed.

- commons-lang3-3.1.jar
- google-cal-plugin.jar
- jersey-core-1.16.jar
- jersey-client-1.16.jar
- jackson-databind-2.1.1.jar
- jackson-core-2.1.1.jar
- jackson-annotations-2.1.1.jar

2.1.2 Installing from a Windows Environment

- 1. Save your work and log off AutoPilot M6.
- 2. Stop the managed nodes and/or Domain Servers that will be updated as specified in the *AutoPilot M6 User's Guide*.
- 3. At your PC navigate to **Start > Nastel AutoPilot M6 > M6 Product Maintenance** to display the following window.

Z AutoPilot M6 I	^p ackage Ma	anager			_	
Installed packages:						
Package	Version	Time	Vendor	Description		Install
AutoPilot M6 JRE	6.0 1.6.0 16	2013-04-11 13:32:18	Nastel Sun Microsystems Inc.	AutoPilot M6		Install From
AIM-Plugin	6.0.20	2010-04-07 10:42:29	Nastel	AIM-Plugin		Verify
ServiceUpdate Core-GEF	6.0.18 2.3.2	2013-03-18 15:43:05 2013-03-18 14:32:56		ServiceUpdate Core-GEF		Repair
TIBCO-RV-Plugin SOLACE-Plugin	2.4.8 2.4.0	2012-11-12 14:22:01 2012-11-13 13:48:45	Nastel Nastel	TIBCO-RV-Plugin SOLACE-Plugin		Uninstall
						Libraries
						About
						Exit

Figure 2-4. AutoPilot M6 Package Manager Window

4. Click **Install** to open the *Select Package to Install* window.

Look jn:	🗼 updates	▼ 🙆 🏂 🔛 ▼	
œ.	Name	Date modified	Type
	AP_CORE_GEF-2.3.2.pkg	1/14/2013 3:54 PM	PKG File
Recent Places	AP_GOOGLE_CAL-1.0.4.pkg	1/18/2013 3:58 PM	PKG File
F 180	AP_SOLACE-2.4.0.pkg	11/7/2012 3:14 PM	PKG File
A COLORED	AP_TIB_RV-2.4.8.pkg	9/21/2012 2:33 PM	PKG File
Desktop			
Libraries			
Computer			
Network	•	m	Þ
	File name: AP_GOOGLE_CAL	-1.0.4.pkg	• <u>Open</u>
	Files of type: All Files (*.*)		 Cancel

Figure 2-5. Select Package to Install Window

5. Select **AP_GOOGLE_CAL-***version_number***.pkg** and click **Open** to install. A confirmation message is displayed when installation is complete.



Figure 2-6. Installation Complete

- 6. Click **Show Detail** to verify installation and to see the following jar files are copied into the **lib** directory.
 - commons-lang3-3.1.jar
 - google-cal-plugin.jar
 - jersey-core-1.16.jar
 - jersey-client-1.16.jar
 - jackson-databind-2.1.1.jar
 - jackson-core-2.1.1.jar
 - jackson-annotations-2.1.1.jar

AutoPilot M6 Package Manager
GOOGLE-CAL-Plugin 1.0.4" installed.
OK Hide Detail
Installing package "AP_GOOGLE_CAL-1.0.4.pkg"
Checking installed packages
Installing "GOOGLE-CAL-Plugin 1.0.4"
Installing libs from pkg
Backing up "lib/google-cal-plugin.jar", mimetype=application/octet-stream
Creating "lib/google-cal-plugin.jar", mimetype=application/octet-stream, size=40185
Backing up "lib/commons-lang3-3.1.jar", mimetype=application/octet-stream
Creating "lib/commons-lang3-3.1.jar", mimetype=application/octet-stream, size=315805
Backing up "lib/jersey-client-1.16.jar", mimetype=application/octet-stream
Creating "lib/jersey-client-1.16.jar", mimetype=application/octet-stream, size=130904
Backing up "lib/jersey-core-1.16.jar", mimetype=application/octet-stream
Creating "lib/jersey-core-1.16.jar", mimetype=application/octet-stream, size=467058
Backing up "lib/jackson-core-2.1.1.jar", mimetype=application/octet-stream
Creating "lib/jackson-core-2.1.1.jar", mimetype=application/octet-stream, size=206379
Backing up "lib/jackson-annotations-2.1.1.jar", mimetype=application/octet-stream
Creating "lib/jackson-annotations-2.1.1.jar", mimetype=application/octet-stream, size=34477
Backing up "lib/jackson-databind-2.1.1.jar", mimetype=application/octet-stream
Creating "lib/jackson-databind-2.1.1.jar", mimetype=application/octet-stream, size=922643
Applying plugin settings
Backing up "plugin.properties", mimetype=text/properties-java
Changing "plugin.properties"
"GOOGLE-CAL-Plugin 1.0.4" installed.

Figure 2-7. Installation Details

7. Click **OK**.

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Chapter 3: Using Calendar Integration Plugin

The Calendar Plugin allows AutoPilot activities to be triggered by calendar events. The expert periodically polls a specified Google calendar for currently occurring events, publishing the details of events that are currently occurring. The expert accounts for the difference in time-zones between the calendar and the CEP server.

You must have a Google account to use the Calendar Plugin. The facts published from the Google calendar are:

- Busy true or false
- Start time
- End time
- Color ID
- Description
- Location.

To start using the Calendar Plugin do the following:

- 1. Create and deploy calendar expert (section 3.1).
- 2. Link Google calendar to the AutoPilot expert (section 3.2).

3.1 Deploying the Calendar Plugin

The following procedure is used to configure the Calendar expert within M6 managed node.

- 1. Open your AutoPilot Console.
- 2. Right-click on the managed node where you want to deploy the Calendar.
- 3. Click **Deploy Expert > GoogleCal > CurrentEvents**. The *Create Current Events* dialogue box (Figure 3-2) is displayed.

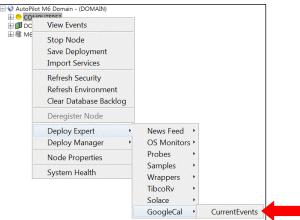


Figure 3-1. Deploy Calendar Expert

4. The *General* tab is displayed. It is recommended that you update all general properties to define your expert. At a minimum apply a definitive name to your expert.

You can leave the defaults for the other options and skip to step 12.

Create CurrentEvents							
General About Depende	encies	Fact Options	Logging	Recording	Restart-Recovery	Security	
Brief description:	GCale	ndars Nodes					
Context:	GCale	ndars_Nodes					
Name:	Name: Support Calendar						
Re-connect rate (secs):	6						
Sampling rate(secs):	60						
		Deploy	Deploy	On]	Help	lose	

Figure 3-2. Create CurrentEvents – General

	Table 3-1. Common Properties: General				
Property	Description				
Brief description	A short, user defined description of the service. The default is the subject expert name (example: GCalendars Node).				
Context	A user defined category that will be registered with the domain server. The default is: GCalendars_Node.				
Name	Name that uniquely identifies the service in the domain. The default name is system assigned with the word service and twelve random digits. (Example: Service_123456789012). You can change the name to anything that suits your needs.				
Re-connection rate(sec)	Rate in seconds at which the expert will attempt to reconnect to the target server, in seconds if connection failed. Default is 6 .				
Sampling rate(sec)	Rate in seconds of fact samplings interval in seconds. Default is 6.				

5. Click the *About* tab. These parameters are common to all experts and cannot be edited.

Create CurrentEvents						
General About De	ependencies	Fact Options	Logging	Recording	Restart-Recovery	Security
Package Title:	Google Cal	Plugin				
Package vendor:	Nastel Tech	nologies, Inc.				
Package version:	1.0.4					
		Deploy	Deplo	y On	Help	Close

Figure 3-3. Create CurrentEvents – About

Table 3-2. Common Properties: About			
Property Description			
Package Title	Implementation title of the source package.		
Package vendor Name of implementation vendor.			
Package version	Package version as assigned by the vendor.		

6. Click the *Dependencies* tab. Edit properties described in the table below, as required. These parameters are common to all experts.

			9	Restart-Recovery	Security
Platform d	lependencies:				
Service d	lependencies:				

Figure 3-4. Create CurrentEvents – Dependencies

Table 3-3. Common Properties: Dependencies			
Property Description			
Platform dependencies	Dependencies on operating system platforms, which is expressed in a comma separated list.		
Service dependencies	Dependencies on other services, which is expressed in a comma separated list.		

7. Click the *Fact Options* tab. Edit properties described in the table below, as required. These parameters are common to all experts.

Create CurrentEvents				10	
General About Dependencies	Fact Options	Logging	Recording	Restart-Recovery	Security
Exclude Expire Filter (regexp):					
Exclude Fact Filters:					
Expire facts(ms):	0				
Fact History Size:	0				
Fact History Time (ms):	0				
Include Expire Filter (regexp):					
Include Fact Filters:					
Lock Fact History:					
	Deploy	Deplo	y On	Help	Close

Figure 3-5. Create CurrentEvents – Fact Options

Table 3-4. Common Properties: Fact Options					
Property	Description				
Exclude Expire Filter (regexp)	A regular expression filter to exclude certain facts from being written to the database.				
Exclude Fact Filters	Comma separated list of fact paths to exclude during publishing.				
Expire facts(ms)	Automatically expires facts that have not been updated in the specified time (ms).				
Fact History Size	Automatically maintains specified number of samples for each published fact in memory.				
Fact History Time (ms)	Automatically maintain fact history not exceeding specified time in milliseconds.				
Include Expire Filter (regexp)	A regular expression filter to include certain facts being written to the database.				
Include Fact Filters Comma separated list of fact paths to include during publishing. For example: *SYSTEM*, *FactName*					
Lock Fact History	Enables/disables history collection after accumulating the first history batch up to Fact History Time or Fact History Size which ever limit is reached first. If disabled newer history samples replace older on a rolling basis.				

8. Click the *Logging* tab. Edit properties described in the table below, as required. These parameters are common to all experts.

Create CurrentEvents							
General	About	Dependencies	Fact Options	Logging	Recording	Restart-Recovery	Security
	ŀ	Audit:					
	Log r	name: services					
Log se	ervice ac	tivity:					
Log	g size (b	ytes): 200000					
		(Deploy	Deplo	y On	Help	Close

Figure 3-6. Create CurrentEvents – Logging

Table 3-5. Common Properties: Logging				
Property	Description			
Audit	Enable/disable service audit trace.			
Log name Log name associated with the service.				
Log service activity Enable/disable service activity trace.				
Log size (bytes)	Enter log file size if the activity is enabled. Default value is 200000.			

9. Click the *Recording* tab. Edit properties as defined in the table below, as required. These parameters are common to all experts.

Create CurrentEv	/ents					
General About D	ependencies	Fact Options	Logging	Recording	Restart-Recovery	Security
Exclude Filter	(regexp):					
Fact State Fr	requency: 10)				
Fact Summary Fr	equency: 50)				
Include Filter	(regexp):					
Record Fac	t History: 📗]				
Record F	act State: 📃]				
Record Fact S	Summary:]				
Storage fo	r History: {se	erver.facts.histo	ory.jdbc.ta	ble}		
Storage	for State: {se	erver.facts.state	e.jdbc.tabl	e}		
Storage for S	Summary: {se	erver.facts.sum	mary.jdbc	.table}		
Summary Inte	rval (ms): 90	00000				
L		Deploy	Deploy	y On	Help	Close

Figure 3-7. Create CurrentEvents – Recording

Table 3-6. Common Properties: Recording				
Property	Description			
Exclude Filter (regexp)	A regular expression filter to exclude certain facts from being written to the database. Facts have the format expert\class\instance\leaf=value such as in the example Servers\Linux\Serv7\processes=40.			
Fact State Frequency	If Record Fact State is enabled, the value entered here specifies how often the Fact State is updated.			
Fact Summary Frequency	If Record Fact Summary is enabled, used to write an intermediate summary record every X th update to the fact during the Summary Interval. In this example, every 50 th update to the fact an intermediate summary record is recorded. This is done to avoid waiting 15 minutes for a summary record to appear in the summary table.			
Include Filter (regexp)	A regular expression filter to include certain facts being written to the database. Same format as described for the exclude filter.			
Record Fact History	If enabled, records every fact change into the History database. The exclude/include filters are respected. To define database tables and set AutoPilot options, refer to <i>AutoPilot M6 User's Guide</i> , section 4.5.4.1.			
Record Fact State	If enabled, records the last value published (current state) into the state database and restores that value when the CEP Server is stopped and restarted. The exclude/include filters are respected. To define database tables and set AutoPilot options, refer to <i>AutoPilot M6 User's Guide</i> , section 4.5.4.1.			
Record Fact Summary	If enabled, records summary record at the interval designated in the Summary Interval (ms) field into the Summary database. The exclude/include filters are respected. To define database tables and set AutoPilot options, refer to <i>AutoPilot</i> <i>M6 User's Guide with Service Update 8</i> , section 4.5.4.1.			
Storage for History	Database table where the Fact History data is stored.			

Table 3-6. Common Properties: Recording				
Property	Description			
Storage for State	Database table where the Fact State data is stored.			
Storage for Summary	Database table where the Fact Summary data is stored.			
Summary Interval (ms)	If Record Fact Summary is enabled, designates the interval of time in ms for which baseline numbers for each numeric fact are computed. Summary Interval is only in affect when CEP instance is running in record mode (ATPNODE –record). Default 900000 is 15 minutes, which means maintain a baseline of statistics for each numeric fact for a period of 15 minutes and write a record to the database. At the end of interval fact statistics is reset and the baseline collection starts again.			

10. Click the *Restart-Recovery* tab. Edit properties as defined in the table below, as required. These parameters are common to all experts.

Create CurrentEvents						
General About	Dependencies	Fact Options	Logging	Recording	Restart-Recovery	Security
	tic start: 🔽 registry: 🔽 Control: 🔽					
	[Deploy	Deplo	y On	Help	Close

Figure 3-8. Create CurrentEvents – Restart-Recovery

Table 3	-7. Common Properties: Restart-Recovery
Property	Description
Automatic start	Check to enable automatic start.
Save in registry	Check to enable saving persistent services in registry .xml file.
Synchronous Control	Check to enable synchronous service initiation.

11. Click the *Security* tab. Edit properties as defined in the table below, as required. These parameters are common to all experts.

Create CurrentEvents						
General About Dependencies Fa	ct Options Logging Recording Restart-Recovery S	ecurity				
Inherit permissions from owner:						
Owner:	Admin	Change				
Permissions:	Group: ☑ Read ☑ Change Delete ☑ Control Other: ☑ Read Change Delete Control					
	Deploy Deploy On Help	Close				

Figure 3-9. Create CurrentEvents – Security

Table 3-8. Common Properties: Security					
Property	Description				
Inherit permissions from owner	Enable/disable inherit permission from ow	vner's permission masks.			
Owner	User that owns the object.				
Permissions	Permissions for users in same group and in	n other groups. Enable/disable as required.			
	Group	Other			
Read	Group members may read/view attributes of an object.	Other users may read/view attributes of an object.			
Change	Group members may change the attributes of an object.	Other users may change the attributes of an object.			
Delete	Group members may delete the object.	Other users may delete the object.			
Control	Group members may execute control actions such as start, stop, and disable. Other users may execute control actions as start, stop, and disable.				
Execute	Group members may execute operational commands on the object.	Other users may execute operational commands on the object.			

12. Click Deploy. A confirmation window is displayed. Click Yes to proceed with deployment.

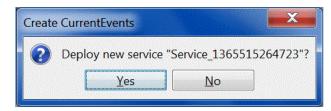


Figure 3-10. Deploy New Service

13. The deployment message will confirm the name and location of the expert. Click **OK**.

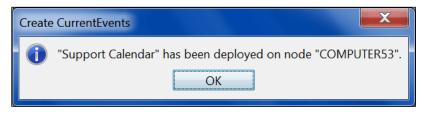


Figure 3-11. Service Deployed

14. The expert is now listed on your domain tree.

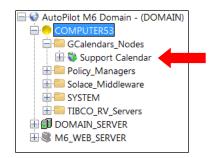


Figure 3-12. Deployed Expert Listed

3.2 Linking Your Google Calendar to AutoPilot

To link your Google calendar to the AutoPilot expert you just created, you need the following information:

- Google Calendar ID This identifies the specific calendar to be tracked.
- Authorization Code This is a security token representing consent by the Google user to share calendar information with the expert.
- 1. Log on to your Google calendar.
- 2. On the left side of the page, click to down-arrow next to **My calendars** to display a drop-down menu and select **Settings**.

M T W T F S S 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 8 9 10 11 12 13 14	Са	le	nd	ar				Today 🕻 🖒	April 201
April 2013 April Foot's Day M T W T F S S 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 April Foot's Day 9	CF	REA	TE	V				Mon	Tue
25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 8 9 10 11 12 13 14	✓ April	120	13			<	>	ISTERNAL PRODUCTION AND INCOMENTATION OF THE OWNER AND INTERPRESS AND INCOMENTATION OF THE OWNER AND INCOMENTATION OF THE OWNER AND INCOMENTATION OF THE OWNER AND INTERPRESS AND	2
1 2 3 4 5 6 7 8 9 8 9 10 11 12 13 14	М	т	w	т	F	s	s		
8 9 10 11 12 13 14	25	26	27	28	29	30	31		
	1	2	3	4	5	6	7	8	9
	8	9	10	11	12	13	14		
15 16 17 18 19 20 21	15	16	17	18	19	20	21		
22 23 24 25 26 27 28	22	23	24	25	26	27	28		
29 30 1 2 3 4 5 15 16 Tax Day	29	30	1	2	3	4	5		16

Figure 3-13. Google Calendar Page

3. If you have more than one calendar listed, click on it to display the *Calendar Details* page. Scroll down to the **Calendar Address** section and copy the **Calendar ID**.



Figure 3-14. Calendar ID

4. Expand the expert, right click GCalendars_Registry to display a menu, and select Add Calendar.

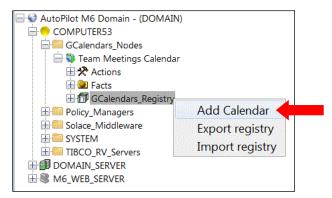


Figure 3-15. Add Calendar

5. Paste the Calendar ID you copied in Step 3 in the Calendar ID field.

GCal profile	
Calendar configuration	
Profile Alias:	profile1
Calendar ID:	62S8a.gvkOLLksPQQUgrKXntQAax2GYzWte
Authorization Code	
Set as default sever pro	ofile: 🔽

Figure 3-16. GCal Profile

6. Click Authorization Code to go to the Google Calendars. Click Allow access.



Figure 2-17. Google Calendar Permission

7. Copy the authorization code.

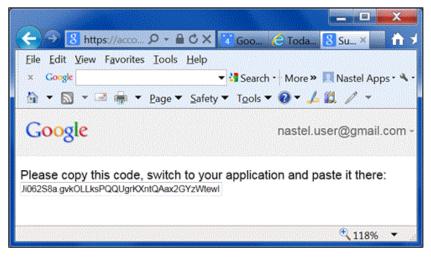


Figure 3-18. Google Calendar Authorization Code

8. Paste the authorization code in the GCal Profile screen and click **OK**. Your Google calendar is now linked to AutoPilot.

Server profile	
GCal profile Calendar configuration:	
Profile Alias:	profile1
Calendar ID:	slujb11ubahong@group.calendar.google.com
Authorization Code	62S8a.gvkOLLksPQQUgrKXntQAax2GYzWtewI
Set as default sever pro	file: 🔽
	OK Cancel

Figure 3-19. Add Authorization Code

3.3 Examples – Using the Calendar Expert

3.3.1 Facts Published to AutoPilot

After you have linked the Google Calendar to AutoPilot, facts will be published to AutoPilot. In the example below, Google Calendar has two events scheduled on April 10, 2013; "Scheduled Maintenance" and "Scheduled Maintenance Invoicing".

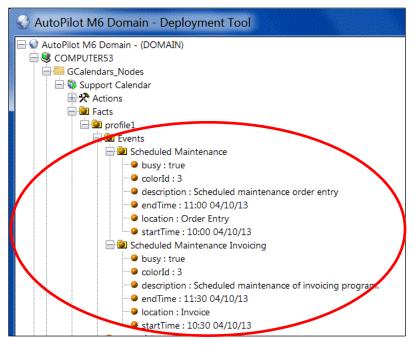


Figure 3-20. Calendar Facts

3.3.2 **Business View Policy**

The next step is to create a policy to trigger an alert in the Business View. This can be accomplished by using the Sensor Wizard. *(Refer the AutoPilot M6 User's Guide.)* After creating the policy, the calendar facts create schedule alerts as seen in the figure below.

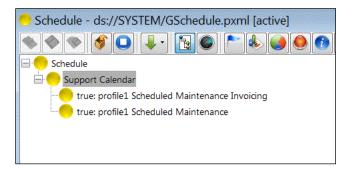


Figure 3-21. Schedule Alerts

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Appendix A: References

A.1 Nastel Documentation

The following table provides a list of reference information required for using the AutoPilot M6 Calendar Integration Plug-in.

Table A-1. Nastel Documentation		
Document Number (or higher)	Title	
M6/INS 600.007	Nastel AutoPilot M6 Installation Guide	
M6/USR 600.011	Nastel AutoPilot M6 User's Guide	
M6/DSB 610.003	Nastel AutoPilot M6 Business Dashboard	

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Appendix B: Conventions

B.1 Typographical Conventions

Table	B-1. Typographical Conventions
Convention	Description
Blue/Underlined	Used to identify links to referenced material or websites. Example: <u>support@nastel.com</u>
Bold Print	Used to identify topical headings, glossary entries, and toggles or buttons used in procedural steps. Example: Click EXIT .
Italic Print	Used to identify titles, menus, screen names, user inputs, or other category.
Monospaced Bold	Used to identify keystrokes/data entries, file names, directory names, etc.
Monospaced Italic	Used to identify variables in an address location. Example: [AUTOPILOT_HOME] \documents, where the portion of the address within the brackets [] are variable.
Monospaced Text	Used to identify addresses, commands, scripts, etc.
Normal Text	Typically used for general text throughout the document.
Table Text	Table text is generally a smaller size to conserve space.

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Glossary

Application: A logical collection of software components that perform a business function, running on a specific server.

AutoPilot M6: Nastel Technologies' Enterprise Application Management Platform. AutoPilot M6 is designed to monitor and control distributed IT services such as application servers, middleware, user applications, workflow engines, brokers, Service Oriented Architecture (SOA) and Enterprise Service Bus (ESB) based applications and their impact on business services.

AutoPilot M6 for WMQ: Nastel Technologies' WebSphere MQ management solution. Re-designated as M6 for WMQ with release 6.0, prior releases retain the AP-WMQ or MQControl trademark.

AutoPilot M6 Web: AutoPilot M6 Web is a browser-based interface that provides monitoring and operational control over managed resources and applications. It allows users to monitor health, recover from a failure, view historical performance graphs and visualize impacts of a failure.

AutoPilot M6/WebSphere Message Queue Integrator (AP/WMQI): Formerly AP/MQSI

AutoPilot/Message Tracking (AP/MT): Nastel's AutoPilot/Message Tracking plug-in that enables AutoPilot/IT to intercept message exits and forward the statistical data to an AutoPilot expert.

AutoPilot TransactionWorks (AP/TW): Nastel Technologies' transaction and application performance monitoring product.

AutoPilot/WebSphere (AP/WS): AutoPilot/WebSphere plug-into enables AutoPilot to monitor and manage *e*Business applications for continuous operations in addition to its standard features.

BCI: See Byte Code Instrumentation

Binary Large Object (BLOB): A collection of binary data stored as a single entity in a database management system. Blobs are typically images, audio or other multimedia objects, though sometimes binary executable code is stored as a blob. Database support for blobs is not universal.

BLOB: See Binary Large Object.

BSV: See Business View.

Business Transaction: A collection of related transactions that comprise a user-defined business function (e.g. purchase a book, return merchandize, purchase stock). Each of the business activities may be comprised of various workloads.

Business View (BSV): A collection of rules that define a desired state of an *e*Business environment. Business Views can be tailored to present information in the form most suited to a given user, as defined by the user.

Byte Code Instrumentation (BCI): The process of adding small portions of Java byte code around methods of a Java class. The added code performs tasks such as time spent or CPU utilization within the monitored class.

CEP (Complex Event Processing) Server: A container that can host any number of AutoPilot services such as experts, managers, policies, etc. (Called managed node prior to AutoPilot M6 Service Update 6.)

Client: Any programming component that uses the AutoPilot infrastructure; for example, the AutoPilot Console.

Common Object Request Broker Architecture (CORBA): A standard defined by the Object Management Group that enables software components written in multiple computer languages and running on multiple computers to work together. It can be invoked from a Web browser using CGI scripts or applets.

Composite Application: A collection of applications that collaborate or communicate with each other (have related sessions).

Console: The console acts as the graphical interface for AutoPilot.

Contacts: A subordinate to a given Manager or Expert.

CORBA: See Common Object Request Broker Architecture.

AutoPilot[®] M6 Plug-in for Calendar Integration

Data Source Name (DSN): The logical name that is used by Open Database Connectivity (ODBC) to refer to the drive and other information that is required to access data. The name is use by Internet Information Services (IIS) for a connection to an ODBC data source, (Example: Microsoft SQL Server database). The ODBC tool in Control Panel is used to set the DSN. When ODBC DSN entries are used to store the connection string values externally, you simplify the information that is needed in the connection string. This makes changes to the data source completely transparent to the code itself.

Data Space: A range of up to two gigabytes of contiguous virtual storage addresses that a program can directly manipulate. Unlike an address space, a data space can hold only data; it does not contain common areas or system data or programs.

Decision Support System (DSS): An AutoPilot-based service designed to monitor, store, and display any event information generated by AutoPilot enabled middleware and applications.

Deploy: To put to use, to position for use or action.

Domain Server: A specialized managed node that maintains the directory of managed nodes, experts etc. The domain server is also capable of hosting experts, managers etc

DSN: See Data Source Name.

DSS: See Decision Support System.

Event: An *Event* is something that happens to an object. Events are logged by AutoPilot and are available for use by AutoPilot Policies or the user.

EVT: Event Log file extension (for example.evt).

Expert: Services that monitor specific applications such as an applications server, Web server or specific components within the applications (example, channels in MQSeries). Experts generate facts.

Fact: Single pieces of data that has a unique name and value. One or more facts are used to determine the health of the object, application or server.

Graphical User Interface (GUI): A type of environment that represents programs, files, and options by means of icons, menus, and dialog boxes on the screen. The user can select and activate these options by pointing and clicking with a mouse or, often, with the keyboard. Because the graphical user interface provides standard software routines to handle these elements and report the user's actions (such as a mouse click on a particular icon or at a particular location in text, or a key press); applications call these routines with specific parameters rather than attempting to reproduce them from scratch.

GUI: See Graphical User Interface.

HAQS: See High Availability Queuing Service.

Heap: In Java programming, a block of memory that the Java virtual machine uses at run time to store Java objects. Java heap memory is managed by a garbage collector, which automatically de-allocates Java objects that are no longer in use

High Availability Queuing Service (HAQS): A component of AutoPilot consisting of two policies that provide automatic queue fail-over for WebSphere MQ applications, provide high availability of WebSphere MQ resources such as queues and channels, and ensure automatic recovery of WebSphere MQ channels.

IIS: See Internet Information Services.

Independent Software Vendor (ISV): A business term for companies specializing in making or selling software, usually for niche markets.

Initial Program Load (IPL): The process of loading system programs and preparing a system to run applications.

Interactive System Productivity Facility (ISPF): An IBM licensed program that serves as a full-screen editor and dialog manager. Used for writing application programs. It provides a means of generating standard screen panels and interactive dialogues between the application programmer and terminal user.

Internet Information Services (IIS): Microsoft's brand of Web server software, utilizing HTTP to deliver World Wide Web documents. It incorporates various functions for security, allows CGI programs, and also provides for Gopher and FTP services.

IPL: *See* Initial Program Load.

ISPF: See Interactive System Productivity Facility.

ISV: See Independent Software Vendor.

Java: A platform-independent, object-oriented programming language developed and made available by Sun Microsystems.

Java Database Connectivity (JDBC): Provides universal data access from the Java programming language. Using the JDBC 2.0 API, you can access virtually any data source, from relational databases to spreadsheets and flat files. JDBC technology also provides a common base on which tools and alternate interfaces can be built. The JDBC *Test Tool* that was developed by Merant and Sun Microsystems may be used to test drivers, to demonstrate executing queries and getting results, and to teach programmers about the JDBC API.

Java Developer's Kit (JDK): A set of software tools developed by Sun Microsystems, Inc., for writing Java applets or applications. The kit, which is distributed free, includes a Java compiler, interpreter, debugger, viewer for applets, and documentation.

Java Management Extensions (JMX): An open technology for management and monitoring that can be deployed wherever management and monitoring are needed. By design, this standard is suitable for adapting legacy systems, implementing new management and monitoring solutions and plugging into those of the future.

Java Messaging Service (JMS): a Java Message Oriented Middleware API for sending messages between two or more clients.

Java Platform, Enterprise Edition (Java EE): The industry standard for developing portable, robust, scalable and secure server-side Java applications. Building on the solid foundation of Java SE, Java EE provides Web services, component model, management, and communications APIs that make it the industry standard for implementing enterprise class service-oriented architecture (SOA) and Web 2.0 applications.

Java Naming and Directory Interface (JNDI): Unified interface to multiple naming and directory services for applications based on Java technology.

Java Run-time Environment (JRE): The minimum core Java required to run Java programs.

Java Server Pages (JSP): Technology that enables rapid development of Web-based applications that are platform independent. Java Server Pages technology separates the user interface from content generation enabling designers to change the overall page layout without altering the underlying dynamic content. Java Server Pages technology is an extension of the Java Servlet technology.

Java Virtual Machine (JVM): The "virtual" operating system that Java-written programs run. The JVM is a hardware- and operating system-independent abstract computing machine and execution environment. Java programs execute in the JVM where they are protected from malicious programs and have a small compiled footprint.

JCL: See Job Control Language.

JDBC: See Java Database Connectivity.

JDK: See Java Developer's Kit.

JMS: See Java Messaging Service.

JMX: See Java Management Extensions.

JNDI: See Java Naming and Directory Interface.

Job Control Language (JCL): A control language that is used to identify a job to an operating system and to describe the job's requirements.

JRE: *See* Java Run-time Environment.

JSP: See Java Server Pages.

JVM: *See* Java Virtual Machine.

Logical Unit of Work (LUW): A collection of operations and messages within a session that should be considered to be a single unit of work (all or nothing property). These are generally delimited by BEGIN/COMMIT calls.

LUW: *See* Logical Unit of Work.

Managed Node: Containers that are capable of hosting any number of AutoPilot services, such as experts, managers, policies etc.

Manager: Managers are the home or container for policies. All business views must reside on managers, and manager must be deployed prior to deploying a business view or policy.

Message: A physical message being transported through the TPN.

Message-Oriented Middleware (MOM): A category of inter-application communication software that relies on asynchronous message passing as opposed to a request/response metaphor.

Message Queue Interface (MQI): Part of IBM's Networking Blueprint. It is a method of program-toprogram communication suitable for connecting independent and potentially non-concurrent distributed applications.

MOM: See Message-Oriented Middleware.

MQI: See Message Queue Interface.

MQSeries: IBM's message queuing product. Renamed by IBM as WebSphere MQ.

Naming Service: A common server records "names" of objects and associates them with references, locations and properties.

Object Request Broker (ORB): In object-oriented programming, software that serves as an intermediary by transparently enabling objects to exchange requests and responses.

ORB: See Object Request Broker.

Orbix: CORBA product distributed by IONA Technologies.

Package Manager: The command line utility that allows users to list, install, uninstall, verify, and update AutoPilot installation on any Managed Node.

PKGMAN: See Package Manager Utility included in AutoPilot products.

Policy/Business Views: A collection of one or more sensors. Business views are used to visually present the health and status of the different systems as well as automatically issue remedial actions.

Resource: An entity on which transactions are executed or a medium of exchange. Examples include queue, DB table, file, JMS topic.

Resource Manager: An entity that is managing a collection of resources. Examples include a WMQ Queue Manager, Application Server, Database Server.

Sensor: A rule that is used to determine the health of an object or application based on one or more facts. Actions can then be issued, based on the health.

Server: A physical or virtual node within a TPN that hosts all transaction processing activity.

Service Level Agreement (SLA): A formal written agreement made between two parties: the service provider and the service recipient. The SLA itself defines the basis of understanding between the two parties for delivery of the service itself. The document can be quite complex, and sometimes underpins a formal contract. The contents will vary according to the nature of the service itself, but usually includes a number of core elements, or clauses.

Service-Oriented Architecture (SOA): An evolution of distributed computing and modular programming. SOAs build applications out of software services. Services are relatively large, intrinsically unassociated units of functionality, which have no calls to each other embedded in them. They typically implement functionalities most humans would recognize as a service, such as filling out an online application for an account, viewing an online bank statement, or placing an online book or airline ticket order. Instead of services embedding calls to each other in their source code, protocols are defined which describe how one or more services can talk to each other. This architecture then relies on a

business process expert to link and sequence services, in a process known as orchestration, to meet a new or existing business system requirement.

Session: A specific period of execution of an application. Examples include the interval during which a database or queue manager connection is active.

Simple Mail Transfer Protocol (SMTP): A TCP/IP protocol for sending messages from one computer to another on a network. This protocol is used on the Internet to route e-mail. *See also* communications protocol, TCP/IP.

SLA: See Service Level Agreement.

SMTP: *See* Simple Mail Transfer Protocol.

SOA: *See* Service-Oriented Architecture.

TCP/IP: See Transmission Control Protocol/Internet Protocol.

Time Sharing Option (TSO): An option of the MVS operating system that provides interactive time sharing from remote terminals.

TPN: See Transaction Processing Network.

Transaction: A group of activities targeted at achieving a common goal or a task. Collection of related sessions and LUWs.

Transmission Control Protocol/Internet Protocol (TCP/IP): A protocol developed by the Department of Defense for communications between computers. It is built into the UNIX system and has become the de facto standard for data transmission over networks, including the Internet.

Transaction Processing Network (TPN): A collection of servers engaged in transaction processing activity

TSO: *See* Time Sharing Option.

Virtual Machine: Software that mimics the performance of a hardware device, such as a program that allows applications written for an Intel processor to be run on a Motorola chip. *Also see* Java Virtual Machine.

WebLogic: A Java EE compatible application server platform which enables support for multiple programming models, which includes advanced administration tools and is the ideal foundation for Service Oriented Architecture (SOA).

WebSphere MQ: IBM's message queuing product, formally known as MQSeries.

Websphere_MQ_Manager: A specialized manager capable of hosting one or more WebSphere MQ specific policies, apart from the regular policies.

Wireless Application Protocol (WAP): An open global specification that is used by most mobile telephone manufacturers. WAP determines how wireless devices utilize Internet content and other services. WAP enables devices to link diverse systems contents and controls.

Write to Operator (WTO): An optional user-coded service that allows a message to be written to the system console operator informing the operator of errors and unusual system conditions that may need to be corrected.

WTO: See Write to Operator.

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