HP Software

Unified Correlation Analyzer for Topology based Correlation V1.1

Release Notes

Edition: 2.0

For the HP-UX (11.31) And Linux (RHEL 5.2) Operating Systems

November 2010

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Contents

Preface

These Release Notes describe critical information related to the HP Unified Correlation Analyzer for Topology based Correlation product. This Manufacturing Release kit is the first release available for customers.

Please read this document before installing or using this Software.

Software Versions

The term UNIX is used as a generic reference to the operating system, unless otherwise specified.

The software versions referred to in this document are as per the following: UCA	**TeMIP**	**UNIX**	**TeMIP Client**
UCA V11I Level 0 Revision A	6.x	HP-UX Itanium (11.31)	TeMIP Client V6.2 Level 1 for Windows: • Windows XP • Windows Vista • Windows Server 2003
UCA V11L Level 0 Revision A	6.x	Red Hat Enterprise Linux Server release 5.2 (Tikanga)	TeMIP Client V6.2 Level 1 for Windows: • Windows XP • Windows Vista • Windows Server 2003

Typographical Conventions

`Courier` Font:

- Source code and examples of file contents.
- Commands that you enter on the screen.
- Pathnames
- Keyboard key names

Italic Text:

- Filenames, programs and parameters.
- The names of other documents referenced in this manual.

Bold Text:

- To introduce new terms and to emphasize important words.

Associated Documents

- *HP UCA TeMIP Integration Guide*
- *HP UCA Installation and Configuration Guide*
- *HP UCA TeMIP Client User Guide*
- *HP UCA User Guide*

Support

Please visit our HP Software Web site at: www.hp.com/go/hpsoftwaresupport for contact information, and details about HP Software products, services, and support.

The Software support area of the Software Web site includes the following:

- Downloadable documentation
- Troubleshooting information
- Updates
- Problem reporting
- Training information
- Support program information

Chapter 1

Introduction

1.1 Products Goals

UCA, which stands for **U**nified **C**orrelation **A**nalyzer, is a universal alarm "correlation" engine, which can be plugged to any network management system to act as an external rule-based analyzer.

However, this release of the product is currently tightly integrated with TeMIP to perform in particular **topology-based** correlation and **service impact**. As such, it can be seen as a replacement of TSM (TeMIP Service Monitor). It has also some **problem detection** or **root cause analysis** capabilities.

1.2 The documentation set and how to use it

To get a quick overview of UCA and its privileged integration with the TeMIP Network Management System, please read the *UCA TeMIP Integration Guide* first. It contains in particular a simple example to start with.

To Install and Configure UCA, please read and comply with *UCA Installation* and *Configuration Guide.*

For information on correlation scenario developments, product concepts and architecture, and advanced usage please read the *UCA User Guide.*

Note: A training/workshop is advised for being able to fully use and master the product. Please contact NGOSS training team at sophia-temip-training@hp.com for more information.

Additionally, the *HP TeMIP Client* documentation (V6.1 or later) describes the new Alarm Navigation enhancements available in Real-time and History Alarm Handling Plug-in windows. This allows for displaying Unified Correlation Analyzer results.

Chapter 2

Unified Correlation Analyzer for Topology based Correlation licenses

2.1 Autopass and UCA

license keys are required to use Unified Correlation Analyzer for Topology based Correlation. Licensing is managed with AutoPassJ (automatically installed with UCA).

2.2 Obtaining a License

Keys must be obtained using the information provided with the license deliverable. An authorization ID is provided for each license, which allows the user to generate license keys from the HP License Key Delivery Service website according to instructions provided with the license agreement. Refer to “HP UCA for Topology Based Correlation Installation and Configuration” Guide for more details.

Chapter 3

What's new with UCA V1.1

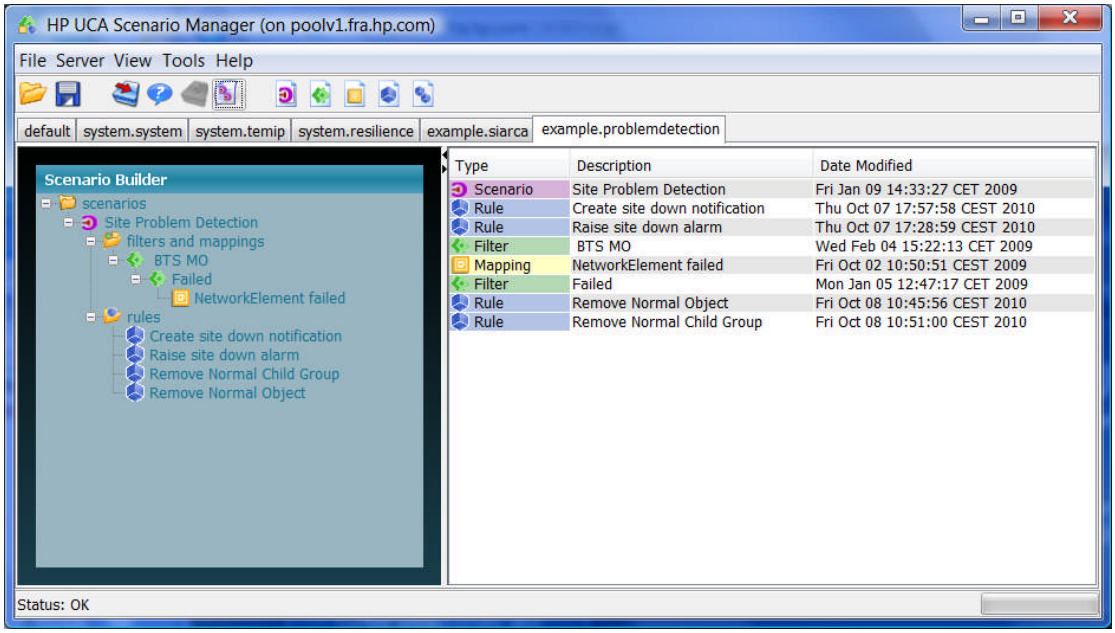
3.1 Support of Linux Operating System (RHEL)

UCA V1.1 can be installed Red Hat Enterprise Linux Server Release 5.2 or higher.

Note: UCA V1.1 provides off the shelf integration with TeMIP 6.1 on Linux (as well as TeMIP V6 + mandatory patches on HP-UX Itanium). See Installation and Configuration guide for more information.

3.2 Value Packs support in Scenario manager GUI.

With the UCA V1.1 version, the Scenario Manager now fully supports Value Packs development by providing a specific tab for each value pack as shown in the picture below:



However, to make sure you avoid problems with UCA rules development and Value Pack usage, please read carefully the information below.

3.2.1 UCA rules development life-cycle

We strongly recommend developing new UCA rule sets directly within a Value Pack. Once constructed, Value Packs are easier to use, maintain or share between teams.
A Value Pack (or VP for short) is a combination of model, rules, actions, sample alarms, documentation, all packaged into one logical unit. VPs can be deployed within the system (e.g. UCA engine) with a single operation. Deployment ensures that the models and rules coming from the VP are **merged** with the existing ones in the system. It also registers the VP name so that everything running in the system can be listed easily.

3.2.2 Creating a new empty Value Pack

An UCA Value Pack is a directory under the $UCA_HOME/valuepacks location.
It has a predefined structure as follows:

```
$ ls
actions          dataload         fcl              models
msl              rules            vp-manifest.xml
```

This structure and the content of the vp-manifest.xml file are fully described in the UCA User Guide document (Value Pack chapter). Please refer to this document for details.

For a new empty VP, the manifest file is the only mandatory one. In particular the rules or models directories can remain empty.
For instance:

```
# cd /opt/uca/valuepacks/
# ls  myVP/*

myVP/vp-manifest.xml

myVP/actions:
total 16
Readme.txt

myVP/dataload:
total 0

myVP/fcl:
total 0

myVP/models:
total 0

myVP/msl:
total 0

myVP/rules:
total 0

# cat myVP/vp-manifest.xml
cat myVP/vp-manifest.xml
<?xml version="1.0" encoding="UTF-8"?>
<valuepack vp-format-version="1.0">
  <group>example</group>
  <name>myVP</name>
  <version>1.0</version>
  <description>A dummy example</description>
```

```
  <priority>10</priority>
  <dependencies>
    <dependency>system.system</dependency>
  </dependencies>
</valuepack>

# cd /opt/UCA-V10I/uca/bin
# vp-deploy.sh hot-deploy.sh myVP system system
VP deployed ok
```

3.2.3 Modifying the VP model

The Value Pack model must be placed in the "models" directory as an xmi file. If you subsequently edit with an UML editor, please make sure you save the file in this directory. When the model file (xmi file) is modified the Valuepack must be redeployed for the changes to take effect.

This is done by the following commands:

```
# vp-undeploy.sh hot-undeploy.sh myVP system system

# vp-deploy.sh hot-deploy.sh myVP system system
```

Note: un-deploying a value pack removes all entities based on the model provided by this value pack unless the preserve-inventory option is specified (see the vp-deploy.sh command manual for options description).

Modifying and testing the VP rules

The value pack rules are created/modified from the Scenario Manager.
When compiled successfully, the Rules can be deployed using the usual 'deploy' button.
Once deployed the rules are active and can therefore be triggered on event collection.

When the rules are working as expected do not forget to save the rules files in the 'rules' directory of the valuepack: from the scenario manager, click on the 'myVP' tab then "File -> Save to local file" menu option.

From this point, each time you modify the rules file, it should be saved in its corresponding VP directory.

3.3 Compatibility with UTM V1.1

UCA V1.1 is compatible with UTM V1.1. If you plan to use UTM for data loading UCA, please contact UCA Product Manager at mailto:TeMIP-Product-Management@hp.com.

Chapter 4

Fixed Problems

This section list the most important problems fixed compared to release V1.0 of the product.

Table 1: Fixed Problems

Reference Severity	Component	Description	Status
CR#4226 High	Engine	**Resilient rules not executed the first time UCA is started after installation.** After a fresh installation, the first time that UCA is started, the Resilience rules are not executes. The effect is that the collector and remote handler are not started.	Fixed
CR#4246 Medium	TeMIP Collector	**Special reserved XML characters are wrongly propagated to UCA within additional text event attributes** for encoding the additional text event attribute the collector uses the CDATA tags that allows encoding XML reserved characters within strings. However it seems that such characters are translated in some way within the text received in UCA. for example the '&' character is not propagated or the '<' character is changed to '&'.	Fixed
CR#4274 Medium	Install scripts	**The UCA PostgreSQL setup script fails when the LANG variable is set to something else than 'C'**.	Fixed

Chapter 5

Known Problems

This section lists problems discovered during testing campaign of the product, which have not been fixed in this version.

Table 2 Software Known Problems

Reference Severity	Component	Description / Workaround	Status
CR#2080 Medium	Engine	**UCA dataload does not support quote character in CSV file** Invalid dataload when loading from the UCA Admin UI a CSV file containing quote character. For instance if the column Unique_Ref is the following: TELLABS6300 .gefion MANAGED_ELEMENT "F6200_31 .slt16_wa1 Provisioned Equipment Rack 0 Subrack 0 Slot 5 OSC 2P OSC Input Port Rx" UCA stores in the topology DB the following entry: ,TELLABS6300 .gefion MANAGED_ELEMENT "F6200_31 .slt16_wa1 Provisioned Equipment Rack 0 Subrack 0 Slot 5 OSC 2P OSC Input Port Rx The ',' character is added at the beginning and the last quote character is removed. This kind of issue can occur when the Mesh Object unique reference is set to a TeMIP Managed Object. For some TeMIP Managed Object a child instance name can be enclosed in quote (when the instance datatype is a Latin1String).	Will be fixed in a future release.
CR#3728 Low	Engine	**Oracle setup: some errors at first execution of thedatabase setup script.** When executed the first time, the Oracle setup issues some errors because it tries to remove objects (tablespace, tables etc...) when they do not exist. Such errors are only warnings and can be ignored.	The database setup scripts will be re-worked in a future release.
CR#3729 Low	Engine	**Oracle setup: some errors reported by oracle setup scripts when run twice** If executed a second time, the Oracle setup script issues some errors because it tries to re-create objects that already exist (users, roles, sequences etc...). Such errors can be ignored.	The database setup scripts will be re-worked in a future release.

Reference Severity	Component	Description / Workaround	Status
CR#4005 High	Engine	**CSV Help button does not provide information for Value Pack models .** There is a known issue with the CSV Help button in the Data Load tab of the System Manager. Presently, this button will only provided CSV help for inventory loads against the default model. For models loaded into the system via a Value Pack selecting 'CSV Help' button generates a blank response. **Workaround:** As a work around for this issue the following commands have been provided to retrieve column names, and therefore the required CSV structure, directly from the database: The structure, i.e. the required columns and order, of the CSV will match the information returned by the given SQL queries. Potentially, classes with the same name can exist in multiple value packs, therefore it is first necessary to discover the Id used when naming the table for the required Value Pack class. Replace the example search values, highlighted in bold, in the query below with the desired class information (value pack name and value pack group). This query is the same for both Postgres and Oracle users: SELECT 'id' FROM uca.mg_valuepacks WHERE group = '**example.group**' and name = '**value pack name**'; Note: The group and value pack names can be found by opening the value pack vp-manifest.xml, located in the directory containing the value pack, <Application installation directory>/valuepacks/'**value pack name**'. The value returned by this query replaces the number, highlighted in bold, in the following SQL statement. The class name, class in the model that the CSV for which file structure is required, must also be substituted: For Postgres users: SELECT column_name FROM information_schema.columns WHERE table_name = 'md_**1_classname**' ORDER BY ordinal_position; For Oracle users: SELECT column_name FROM DBA_TAB_COLS WHERE TABLE_NAME ='md_**1_classname** ' For example, if the CSV structure is required for a class called '**site**' in a value pack called	This will be fixed in a future release. See the workaround in the Description column of this table.

Reference Severity	Component	Description / Workaround	Status
		'**DTVExample**' with a group name of '**example.valuepack**' SELECT 'id' FROM uca.mg_valuepacks WHERE group = '**example.valuepack**' and name = '**DTVExample**'; Assuming, for the purposes of this example, this query returns the value '**5**' and the CSV structure is required for a class called '**site**', the second query becomes: For Postgres users: SELECT column_name FROM information_schema.columns WHERE table_name = 'md_**5_site**' ORDER BY ordinal_position; For Oracle users: SELECT column_name FROM DBA_TAB_COLS WHERE TABLE_NAME ='md_**5_site**'	
CR#4006 Low	Engine	**Custom Actions generate unexpected ERROR message in log file when executed** The following Error log can be seen in UCA log file when custom actions are executed. ERROR:[main][RemoteHandler] processRequests() - Unrecognised request from NotificationManager web service [1001] Such log should be ignored there is no error here.	This problem will be fixed in a future release.
CR#5261 High	Engine	**resynchronization not performed and output not enabled when killing the collector** If the UCA collector is killed or manually stopped, It is restarted automatically by the UCA server. However, in some circumstances the resynchronization is not performed leaving the collector waiting infinitely for the resynchronization request and making the collection ineffective. **Workaround:** A Complete UCA stop and re-start is necessary.	This problem will be fixed in a future release.
CR#5367 High	Engine	**Valuepack 'cold' deployment does not preserve inventory** Un-deploying a valuepack removes all entities of the classes provided by this valuepack from inventory. When updating a valuepack it is necessary to preserve the inventory, a specific option of the vp-deploy.sh command ('preserve-inventory') is used for that. However this option works only for hot-undeploy/deploy.	Valuepack deployment should be enhanced in a future release.

Reference Severity	Component	Description / Workaround	Status
		Workaround: Before updating a value-pack, start UCA and use the hot-undeployment/deployment feature with the preserve-inventory option.	
CR#5371 Medium	Engine	**Rule action 'reset object to normal state' does not work** This action that is supposed to change an object state (whatever the current state) to normal doesn't work as expected. **Workaround:** Use the actions 'force degraded object to normal' or 'force failed object to normal' instead.	This problem is under investigation, it will be fixed in a future release.
CR#5470 High	Setup	**UCA setup fails if nslookup does not return the fully qualified hostname** UCA setup requires a fully qualified hostname (including the domain name) for a proper functioning. The UCA setup script uses the 'nslookup' unix command to return the fully qualified hostname. In the case this command returns an invalid result, the UCA setup will fail. **Workaround:** Verify that the nslookup command returns the fully qualified hostname before running the UCA setup.	UCA setup robustness will be enhanced for next release.
CR#5520 Low	Engine	**Scenario Manager Split windows sometimes does not work** Sometimes we have observed that the scenario part (i.e left side) of the Scenario Manager is not displayed. There are 2 little black arrows for select the part to be edited in full window (scenario tree or rules set), but when the problem is present, these arrows have no effect. A restart of the Scenario Manager solves the problem.	This problem is under investigation, it will be fixed for the next release.
CR#5705 High	Engine	**The Refresh button of the UCA working memory viewer sometimes does not work** **Workaround:** Close and restart the working memory viewer	This problem is under investigation, it will be fixed for the next release.

Reference Severity	Component	Description / Workaround	Status
CR#5778 Medium	Engine	**System Manager status pane not refreshed at shutdown/startup** Sometimes when stopping UCA from the system manager, the GUI is freezing: the tomcat restart message is never received, and the mouse button is looping forever. **Workaround:** Killing the current System Manager and restarting a new one shows the two tomcat green arrows as expected.	This problem is under investigation, it will be fixed for the next release.

CR#5927
High
	Setup	**Changing the configuration from monolithic to resilient using UCA setup requires the Resilience VP to be un-deployed/re-deployed**
		The uca_setup script allows changing the UCA server configuration from a single server mode (monolithic) do a dual server mode (resilience).
		This configuration is made by changing some properties in the RESILIENCE valuepack.
		Unlike any other properties, the valuepack properties are not taken into account at the process startup, but when the valuepack is deployed.
		This means that changing the UCA server mode, requires the RESILIENCE Valuepack to be un-deployed and re-deployed.
		Workaround:
		Un-deploy the RESILIENCE VP:
		`# vp-deploy.sh cold-undeploy Resilience system system`
		Re-deploy the RESILIENCE VP:
		`# vp-deploy.sh cold-deploy Resilience system system`
			In next release the uca_setup script will be enhanced to include the resilience valuepack re-deployement

Chapter 6

Known Limitations

6.1 No compatibility with UCA V1.0 version.

Due to some changes in the Database format, the UCA Manufacturing release is not compatible with the UCA V1.0. Compatibility or automatic migration was not a goal for UCA V1.1 version.

Before installing the UCA V1.1 Manufacturing Release; if you have the UCA V1.0 already installed on your system; be sure to:

- Uninstall the UCA V1.0.
- Remove the /opt/uca directory
- Remove the /opt/UCA-V10I directory
- Remove /var/opt/uca directory

6.2 TT actions:

The UCA V1.1 provides only three actions for creating, closing and canceling Trouble Tickets in Service Manager using the OSS/J interface. Additional TT actions (for instance Associate TT) will be available in a future UCA release.

CR#5927 High	Setup	**Changing the configuration from monolithic to resilient using UCA setup requires the Resilience VP to be un-deployed/re-deployed** The uca_setup script allows changing the UCA server configuration from a single server mode (monolithic) do a dual server mode (resilience). This configuration is made by changing some properties in the RESILIENCE valuepack. Unlike any other properties, the valuepack properties are not taken into account at the process startup, but when the valuepack is deployed. This means that changing the UCA server mode, requires the RESILIENCE Valuepack to be un-deployed and re-deployed. Workaround: Un-deploy the RESILIENCE VP: `# vp-deploy.sh cold-undeploy Resilience system system`	In next release the uca_setup script will be enhanced to include the resilience valuepack re-deployement

		Re-deploy the RESILIENCE VP: `# vp-deploy.sh cold-deploy Resilience system system`	

Chapter 7

Code Signing

This Software Product from HP is digitally signed and accompanied by Gnu Privacy Guard (GnuPG) key.

7.1 On Red Hat Enterprise Linux platform

Below mentioned procedure* allows you to assess the integrity of the delivered Product before installing it, by verifying the signature of the software packages.

Pick the signature (.sig) file shipped along with the product and use following GPG command

gpg --verify <product.sig> <product>
Example: gpg --verify VPNSVP-X51-3A.zip.sig VPNSVP-X51-3A.zip

Note: Look for the comments shown below in the command output
Good signature from "Hewlett-Packard Company (HP Code signing Service)"

==========
Note: If you are not familiar with signature verification using GPG and intended to verify HP Product signature, follow the steps given below.

1. Check whether gnupg gpg is installed on the system. If no, install gnupg gpg

2. Configure GPG for accepting HP signature. The steps are the following:
    a. Log as root on your system

    b. Get the hpPublicKey from following location:

    https://h20392.www2.hp.com/portal/swdepot/displayProductInfo.do?productNumber=HPLinuxCodeSigning and save it as hpPublicKey.pub

    Note that the hpPublicKey file will be located in the root's home directory.

    c. Follow the instruction found at above URL in the "Verification using GPG" section.

**HP strongly recommends using signature verification on its products, but there is no obligation. Customers will have the choice of running this verification or not as per their IT Policies*
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