IBM Tivoli Monitoring for Virtual Environments
Beta Drop 4, November 2012

This document contains late breaking information about this version of the Virtual Environments Beta code. Because this is early beta level code, the product documentation, code, and online help contain inconsistencies about function and nomenclature. This document attempts to clarify what to expect in this version.

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Read this document prior to installing this version of the Beta code.

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1.0 New Functions Available in this Beta

The following key functions are provided in this version of the Beta code:

**Cisco UCS Agent** -- See the updated Cisco UCS agent user's guide for information on changes to the agent. Documents updated for this Beta can be downloaded from the Beta site.

**VMware VI Agent** -- See the updated VMware VI agent user's guide for information on changes to the agent. Documents updated for this Beta can be downloaded from the Beta site.

**KVM Agent** -- See the updated Linux KVM Agent user's guide for information. Documents updated for this Beta can be downloaded from the Beta site.

**Citrix XenApp Agent** – See the updated Citrix XenApp Agent user's guide for information. Documents updated for this Beta can be downloaded from the Beta site.

**Citrix XenServer Agent** -- See the updated Citrix XenServer Agent user's guide for information. Documents updated for this Beta can be downloaded from the Beta site.

**Citrix XenDesktop Agent** -- See the updated Citrix XenDesktop agent user's guide for information. Documents updated for this Beta can be downloaded from the Beta site.

- **VMware Dashboard, VMware Capacity Planner, PowerVM Capacity Planner, and Reports**: See the updated Dashboards, Reporting, and Capacity Planning (DRCP) User’s Guide for information. Documents updated for this Beta can be downloaded from the Beta site.

- **VMware Dashboard** –
  The following new content is being delivered for VMware Dashboard:
  - The Administrator has the ability to monitor the following using the VMware Dashboard:
    - “Cluster Instance Specific Properties” on Cluster Instance (Details) page - Properties tab
    - Standalone Servers details
    - “Physical Network Interface views” on Server Instance (Details) Page - Network tab
    - “Physical Network Interface Metrics views” on Server Instance (Details) Page - Network tab
    - “DataStores Information” on DataStores Page - Overview tab
    - “Top 5 Datastores by % Utilization view” on DataStores Page - Overview tab
    - “DataStore Instance Specific view” on DataStore Instance (Details) Page - Overview tab
• “Situation Events view” on DataStore Instance (Details) Page - Overview tab
• “Resource Relationship views” on DataStore Instance (Details) Page – All tabs
• “Virtual Machines Information” on Virtual Machines Page - Overview tab
• “Top 5 VMs by % Utilization views” on Virtual Machines Page - Overview tab
• “VM Instance Specific views” on Virtual Machine (Details) Page - Overview tab
• “Situation Events views” on Virtual Machine (Details) Page - Overview tab
• “Resource Relationship views” on Virtual Machine (Details) Page - All tabs

- VMware Capacity Planner – The following new content is being delivered for VMware Capacity Planner:

  • Federation Automation for homogeneous federation to TDW on DB2
  • Automated shell/bat scripts for setting up federation between Capacity Planner DB and TDW (on DB2) included in the Capacity Planner database installer package.
  • Enhanced automation for heterogeneous federation to TDW on Oracle and MySQL
    - Note: Currently heterogeneous federation needs to be setup manually following the documented steps in Appendix B.
  • DB2 10.1 support

- Additional workload analysis report for VMware – A new report to compute and visualize details of additional workloads that can be accommodated in the environment if recommended plan is implemented. This report supports virtualization overhead.
- Support for loading configuration data incrementally - Earlier the capacity planner load configuration loaded all the available data with ITM and would overwrite the contents in the Capacity Planner database. With the incremental data load, the configuration table columns in capacity planning are refreshed when the corresponding data on VMware VI agent changes.
- Federation configuration setup for heterogeneous federation is enhanced and automated significantly saving database administrator's time improving the Time To Value. The automated heterogeneous federation is available for Oracle and MySQL databases.
- Actionable Recommendation Report- Report that highlights actionable task post optimization on the optimized report such as movement of VMs across clusters, VMs that could not be placed etc.

- PowerVM Capacity Planner – The following new content is being delivered for Power Capacity Planner:
• Support for Capacity planning in PowerVM environment includes loading of configuration data and modification UI and reports for PowerVM terminology.

• LPAR Sizing based on utilization data using WLE basic flow – the user can select sizing action that launches WLE and then takes the user through 3 steps to generate sizing output. Please see “known issues” list for limitations of this functionality in beta code.

• Sizing and Inventory Reports

• **Support for loading configuration data in an iterative manner.** Previously the capacity planner load configuration loaded all the available data with ITM populate the contents in the Capacity Planner database. With the iterative data load, it is possible to iteratively load selected data from ITM.

• **Federation configuration setup for heterogeneous federation is enhanced** and automated significantly saving database administrator's time resulting in Time to Value improvement. The automated heterogeneous federation for PowerVM is available for the Oracle database.

• **Five Step process in Planning Center** – Planning center workflow from data load to inventory views/ reports for PowerVM. Steps to perform the compute usage action and launch the sizing engine to calculate the required LPAR sizes are also available.

• **Ability to size LPARs for retired power systems.** With this enhancement, it is possible to size LPARs for retired system using the “Existing system” option.

• **New Power VM Recommended Environment Report** – A new report that summarizes and shows the current and recommended allocations for LPARs is available.

• **Enhance Load Config to support Selective loading & Update configuration data**
  The Configuration data in Capacity Planner DB is refreshed with the current environment snapshot while maintaining user customization like Resource sizing, augmented attributes. Selective loading of managed systems can help saving time for loading all the managed systems and enable user to iteratively load the environment. These options are added to Step 1 of the Planning Center Wizard. Also, the user has an option to delete current data and load the environment afresh if necessary

• **Sizing Rules to apply business and technical policies for optimization**
  Capacity Planner can apply sizing policies based on Best Practices or Performance Trends to guide the optimization. These sizing policies can imported using the Import Knowledge base option on the Edit Current Environment page and can be enabled or disabled on the Edit Recommended Environment settings page. Using these policies, the Capacity planner can provide sizing inputs to the Planner

• **Additional Workload Report for PowerVM**
  Additional workload analysis report provides information on how many additional workloads, can be accommodated on the target environment. This is helpful to understand the available capacity of the environment and what
the resource constraints. Users can apply different workload profiles to do What-if analyses. This report is available after the Generate Plan step is executed on the Planning Center

- Utilization TimeSeries reports for PowerVM

Timeseries reports allow Capacity Planner to Utilization patterns for LPARs and identify correlation in workload patterns. The Utilization detailed timeseries report helps the user to analyze data gaps, if any in the utilization data for the Workloads which are being analyzed. The Utilization aggregated timeseries report can help analyze the utilization patterns and also correlations if any among the patterns. These reports can help the user take a decision on sizing parameters to be used to computing usage on the workloads. These reports are available in the LPAR Utilization View on the Edit Current Environment tab.

2.0 General Image and Installation Information

There is no upgrade support between beta drops. Previous Beta installations, including the IBM Tivoli Monitoring components (for example, databases used by IBM Tivoli Monitoring), must be completely uninstalled to ensure a fresh environment.

- Capacity Planner, VMware Dashboard, and Reports Image
  - Capacity Planner (VMware and PowerVM), VMware Dashboard, and Reports (VMware agent, Linux KVM agent, and Capacity Planner Reports) are included in a single image itmfve_dashboard_<ID>.tar.gz
  - Extract (itmfve_dashboard_<ID>.tar.gz) ITMfVE 7.2 Build image to a temporary folder, for example C:beta4.
  - Installer repository is part of ITMfVE 7.2 build image: The extracted file contents will look like the following:

<table>
<thead>
<tr>
<th>Name</th>
<th>Date Modified</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>ed</td>
<td>11/19/2012 12:30</td>
<td>File Folder</td>
</tr>
<tr>
<td>documentation</td>
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<tr>
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</tr>
<tr>
<td>im.windows x86</td>
<td>11/19/2012 12:30</td>
<td>File Folder</td>
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<tr>
<td>launchpad</td>
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<td>Reports</td>
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<td>File Folder</td>
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<td>too</td>
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<td>File Folder</td>
</tr>
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<td>autorun</td>
<td>11/15/2012 11:08</td>
<td>Setup information</td>
</tr>
<tr>
<td>db73 bailout</td>
<td>11/6/2012 10:18</td>
<td>Setup information</td>
</tr>
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<td>install</td>
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<td>Windows Batch File</td>
</tr>
<tr>
<td>install.sh</td>
<td>11/6/2012 10:22</td>
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<tr>
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<td>Application</td>
</tr>
<tr>
<td>launchpad54</td>
<td>11/5/2012 11:09</td>
<td>Configuration Settings</td>
</tr>
</tbody>
</table>

- Please refer to the DRCP Guide updated for detailed instructions on installing these components using Launchpad.
• **ITM for Virtual Environments Agent Image**
  - ITM for Virtual Environments Agents (VMware, Linux KVM, NetApp, and NMA) are included in a single image `itmfe_agents_<ID>.tar.gz`
  - Extract the ITMfVE 7.2 Build image (`itmfe_agents_<ID>.tar.gz`) to a temporary folder, for example `C:\beta4Agents`
  - Please refer to any VE Agent’s User Guide for detailed instructions on installing the agents.

In general, install the ITM for Virtual Environments components in the following order:

1. Install agents into IBM Tivoli Monitoring and ensure that you are able to see information about your VMware environment in the Tivoli Enterprise Portal. Individual Agent User’s guide should be referenced to install and configure the agents. Any changes or special instructions to an Agent installation will be covered in a marked section below.

2. Install JazzSM 1.1 followed by Tivoli Common Reporting V3.1. JazzSM installs DASH (formerly called Tivoli Integrated Portal) needed for the dashboard and the reporting infrastructure for the VMware and capacity reports.

3. Install and configure the Virtualization Dashboard. For details, see DRCP User’s Guide updated on the Beta site.

4. Install VMware and PowerVM Capacity Planner. For details, see DRCP User’s Guide updated on the Beta site.

5. Install the Tivoli Common Reporting reports (Agent Reports and Capacity Planner Reports) using the LaunchPad. For details, see DRCP User’s Guide updated on the Beta site.

There is no upgrade support between beta drops. Previous Beta installations, including the IBM Tivoli Monitoring components (for example, databases used by IBM Tivoli Monitoring), must be completely uninstalled to ensure a fresh environment. IBM recommends that user create a new database for each installation.

### 3.0 Use-cases for network and storage aware capacity planning

Network awareness is essential to planning decisions as workloads are getting more and more network intensive. Planner recommendations should ensure that network capacity does not become a bottleneck either at the host level or anywhere else in the network. Furthermore, clients should be able to analyze what resources get bottlenecked as their workloads grow over time. This section lists various use cases for network-aware capacity planning – we list only those use cases that have been implemented and delivered in this Beta drop of SCM V7.2.

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*Use case 1a: Host level network capacity check*
**Description:** In this use case the combined network demand of all the VMs that are placed on a host is checked against the combined network capacity of all the NICs on a host and it is ensured that the combined network capacity is not violated.

**Output Data:** Generation of plan will take into account host level network capacity checks and it will log any constraint check fails

**Note:** Ideally, this use case should take into account what percentage of a VM’s network demand is to another VM that is collocated on the same host. This percentage should be decreased from the VM’s total network demand since that traffic will not go out of the host (unless VEPA mode is being used – which is rare). However, this requires VM to VM flow level information and this use case assumes that such flow level information is not available.

**How to enable/disable this check:**
The host level network capacity check can be enabled or disabled using the flag “DISABLE_NETWORK_CAPACITY_CHECK” in analytics.properties file. This check is disabled by default (DISABLE_NETWORK_CAPACITY_CHECK=TRUE).
To enable network capacity check, the following property must be defined in analytics.properties file.
DISABLE_NETWORK_CAPACITY_CHECK=FALSE

Headroom for network capacity is specified through a property name (GLOBAL_NETWORK_HEADROOM_PERCENTAGE) in analytics.properties file.
User can specify any value between 0 to 100 as a network IO headroom.

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**Use case 1b1 Host level storage access check**

**Description:** In this use case the planner should ensure that the VM to data store connectivity/access exists and it should be placed only on those hosts that have access to data store(s) used by it.

**Output Data:** Generation of plan will ensure that a VM is placed only those hosts that have access to the datastore(s) used by that VM and it will log any failures of this condition.

**How to enable/disable this check:**
The host level storage checks can be enabled or disabled using the flag “DISABLE_STORAGE_CHECKS” in analytics.properties file. This check is disabled by default (DISABLE_STORAGE_CHECKS=TRUE).
To enable storage checks, the following property must be defined in analytics.properties file.
DISABLE_STORAGE_CHECKS=FALSE
**Use case 1b2: Host level storage capacity check**

**Description:** In this use case the combined storage demand of all VMs that are placed on a host is checked against the combined storage capacity of all HBAs/storage adapters on a host and it is ensured that the combined storage capacity is not violated.

**Output Data:** Generation of plan will take into account host level storage capacity checks and it will log any constraint check fails

**How to enable/disable this check:**
The host level storage checks can be enabled or disabled using the flag “DISABLE_STORAGE_CHECKS” in analytics.properties file. This check is disabled by default (DISABLE_STORAGE_CHECKS=TRUE).
To enable storage checks, the following property must be defined in analytics.properties file.
DISABLE_STORAGE_CHECKS=FALSE

**Assumption/Design questions:**
- Checks are done against the overall disk IO demand of all VMs on server and the entire spare disk IO capacity of the physical server (which is a sum of individual HBA capacities on the host) rather than against the individual host bus adapter (HBA) disk IO capacity.

Headroom for HBA disk IO capacity is specified through a property name (GLOBAL_DISKIO_HEADROOM_PERCENTAGE) in analytics.property file. User can specify any value between 0 and 100 as disk IO headroom.

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**Use case 2a: Localized placement for VMs that communicate frequently (specified through user input)**

**Description:** A user should be able to specify a group (or pair) of VMs that communicate frequently and have high traffic rate between them. Planner will try to ensure that VMs with HIGH traffic rate between them are placed on servers in the same cluster.

In this use case, a set of VMs specified by a user as group (through a user tag), are placed on servers that belong to the same physical server cluster.

Each VM is associated with a **VMCluster** and a target server is associated with a **TargetCluster**. The use case introduces the following **clustering constraint** on the placement scheme: all VMs that belong to the same VMCluster are placed on target servers that belong to the same TargetCluster. However, this constraint is soft: the constraint should be ensured only if it does not result in violation of other constraints (collocation, utilization), or it does not result in some VM remaining not placed. Note
that, localized placement of a set of VMs that communicate frequently can be ensured by associating the VMs in the set with the same VMCluster.

The VM Clustering algorithm follows a first fit algorithm in the descending order of free CPU on target cluster. Target clusters with already used target servers are given higher priority, followed by target clusters with larger free CPUs to minimize number of systems.

**How to enable/disable this check:**
There is a flag (DISABLE_VM_CLUSTERING_CONSTRAINT) in the analytics.properties file to disable or enable VM Clustering. It is set to true (disable) by default. It should be changed to false to enable VM clustering.

3. The VM CLUSTER ID can now be an arbitrary String. Identical Cluster ID strings will be internally mapped to a unique long (starting from id value of 100), and this mapping will be printed in the log. The log will use the mapped long value to identify the VM Clusters.

**Assumption/Design questions:**
- The VM_CLUSTER_ID of a VM, which specifies the VMCluster of the VM, should be populated by the user. The VM CLUSTER ID can be an arbitrary String.
- The current implementation assumes that VisianPlacement is the algorithm used for Placement, and modified that algorithm.
- The current implementation assumes that the VM_CLUSTER_ID value is of type long. (This will be changed to String in the next version.)

**Required input data:**
- A user specifies a tag for each VM which is part of a group that needs to be placed in the same physical server cluster. This is done through the capacity planner user interface. This tag is referred to as the VMCluster ID of a VM. VMCluster of a VM is specified in the table ANL_SERVER_TAGS where TAG_TYPE column is “VM_CLUSTER_ID” and TAG_NAME column specifies the value. The value should be specified by the user. The VM CLUSTER ID can be an arbitrary String. If unspecified, the VM_CLUSTER_ID is set to the default value of -1, indicating that the VM has no associated clustering constraint.
- For a target server, its poolName (column SERVER_POOL_NAME in TargetView) is used as its TargetClusterID. (TargetClusterID of a target server specifies its TargetCluster.)

**Output Data:** Generation of plan will take into account user input on group (or pair) of VMs that have high network traffic, and will try to allocate those VMs on servers within the same cluster. If no use input is specified, the placement could be either within the same cluster or across different clusters. It will log any constraint check fails
**Failure/Violation event logging:**

Info/Debug logging in following cases:

- Clustering constraint is violated because two VMs in the same VM Capsule have different VMClusterID (see above).
- Unable to place a VM in presence of the Clustering Constraint, i.e., no target in the selected TargetCluster satisfies the co-location and capacity rules. (In this case, after raising a warning, placement is retried for the VM without the clustering constraint.)

**4.0 Limitations**

This is an early beta release and there are a number of limitations that you might encounter. The following limitations are some of the most significant:

- **Citrix XenApp limitations:**
  1. Supported Citrix XenApp versions:
     - XenApp 6.5 (All Editions) Note: Session-host-only installation is not supported.
     - XenApp 6.0 (All Editions)
     - XenApp 5.0 (All Editions)
  2. Supported Citrix XenApp agent platforms:
     - XenApp 6.0 and 6.5
       - Windows(R) 2008 R2 x64 (All Editions)
     - XenApp 5.0
       - Windows 2008 x64 (All Editions)
       - Windows 2008 x86 (All Editions)
       - Windows 2003 x64 (All Editions)
       - Windows 2003 x86 (All Editions)
  3. If you have two farms with the same name, only one of it will be displayed in the TEP. Two subnodes with the same subnode key cannot be displayed.
  4. The Citrix XenApp farm monitoring is supported on all editions of XenApp 6.0 and XenApp 6.5. It is **not** supported on any edition of XenApp 5.0.

- **Power VM Capacity Planner limitations:**
  Currently, only the “Recommended Environment Report” is available. The other report links for PowerVM reports will not be functional.

- **Power VM and VMware Capacity Planner limitations:**
  For Capacity Planner database installed on Unix, federation of Oracle Tivoli Data Warehouse tables is a manual process. The procedure to create wrapper, server, and user mapping is documented in Appendix B.
VMware Dashboard limitations:
The following UI integration from IBM Tivoli Monitoring for Virtual Environments Dashboards is NOT implemented in this Beta:
- The Tivoli Application Dependency Discovery Manager (TADDM) change and configuration details view displayed in context in the Dashboards.
- Updates to the TADDM console view in order to visualize change and configuration details about the resources selected in the IBM Tivoli Monitoring for Virtual Environments Dashboards.
- Launch in context from the Dashboards or panels into Tivoli Monitoring and the Tivoli Enterprise Portal.

5.0 Known Issues

Defect 27733: Memory Leak issue with ITMDP/evaluator

Problem Description: The TEPS becomes unresponsive. The VMWare dashboard fails to display data, the TEPS logs show an OutOfMemoryError, or TEP client fails to login with the error: "KFWM392E Internal error occurred during logon".

Workaround: Alter the memory heap size allocated to Java using the wsadmin command line tool:

1) Stop the TEPS using the MTEMS GUI or command "itmcmd agent stop cq".
2) Navigate to the TEPS eWAS home\bin directory.
   Linux/Unix: $CANDLEHOME/\<arch>/iw/bin
   Windows: <ITM_install_dir>\CNPSJ\bin
3) Access the interactive jython prompt via wsadmin.sh. Once the tool is started the prompt will change to "wsadmin>":
   Linux/Unix: ./wsadmin.sh -conntype none -lang jython
   Windows: wsadmin.bat -conntype none -lang jython
4) Set the JVM variable to the first Java returned by AdminConfig.list("JavaVirtualMachine") and verify what that the JVM variable got set correctly:
   wsadmin> jvm = AdminConfig.list("JavaVirtualMachine").split("\n")[0]
   wsadmin> print jvm
   The output should be similar to:
   (cells/ITMCell/nodes/ITMNode/servers/ITMServer|server.xml#JavaVirtualMachine_<epoch>)
5) Increase the initial and maximum heap sizes size from the defaults of 50 and 256:
wsadmin> AdminConfig.modify(jvm, ["initialHeapSize", 512])
wsadmin> AdminConfig.modify(jvm, ["maximumHeapSize", 1024])

6) Save the changes and exit:
   wsadmin> AdminConfig.save()
   wsadmin> exit

7) Restart the TEPS.

NOTE: On Linux/Unix, verify the changes by running "ps -ef | grep iw". Look for the following:

-Dibm.websphere.internalClassAccessMode=allow
-Xms512m
-Xmx1024m

Additional Information:

Defect 71240: VMware Reports Installation
   Problem Description: Report Installer doesn't get launched if java path variable is not initialized.
   Workaround: Set the java path in system variables.

Defect CXEN-991: XenServer Agent - Application support installation fails on Linux and UNIX platforms.

   Problem Description: Attempting to install XenServer agent application support on Linux or UNIX platforms fail with an error like "ERROR - Unable to unzip VER file tmp/KXIJSTPS_unix.ver...java.lang.NullPointerException"
   Workaround: Under the ITMfVE_XenApp_Application_Support directory, delete all files matching the pattern, KXIJS*.jar in the unix directory. Example 'rm <image root>/ITMfVE_XenApp_Application_Support/unix/KXIJS*.jar'

Defect XAP-993: XenApp Agent - Agent is unable to connect to Remote Farm Server when running under a non-XenApp Administrator account

   Problem Description: Attempting to start the Citrix XenApp agent as a non-XenApp administrator results in a failure to connect to remote XenApp farms configured in the agent's farm monitoring.
   Workaround: Change the Service Startup for Monitoring Agent for Citrix XenApp to 'Log on As account' and set it to an Active Directory account that is both part of the farm's XenApp administrator group and also a local Administrator on the XenApp system being used for the remote farm monitoring.
Defect 195191: VMware VI Agent  
**Problem Description:** `tacmd listsystems` command is showing 07.20.00.00 version for main node and 07.10.00.00 version for subnodes.

Defect 71523 VMware Expense Reduction Report  
**Problem Description:** Under Recommended Optimizations section of VMware Expense Reduction Report, for the table "Virtual Machines that should be moved between Clusters", the Original and Target Clusters listed should be distinct.  
**Workaround:** None

Defect 194831.1: VMware Dashboard  
**Problem Description:** Dashboard fails to load data on IE 8 and IE 9  
**Workaround:** No known workaround available. Dashboard works on Firefox 10 ESR.

Defect 195336: VMware Dashboard - Sometimes Data on tables are not seen  
**Workaround:** The work around is to click on the first column heading, or minimize maximize the page.

Defect 195477: VMware Dashboard - Links present in Situation tables are not working  
**Problem Description:** The situation name and source name are seen as links, in the situation table. But currently the links are not working.  
**Workaround:** None

Defect 195638: VMware Dashboard - Incorrect data displayed for first time load of linked pages  
**Problem Description:** While opening linked pages from the home page of VMware Dashboard, it displays data for unrelated component. This behavior is observed for each linked page while that type of page is viewed for the first time per user session.  
**Workaround:** Current work around for this issue is to go back to the parent page (through breadcrumb) and select the component again. This reloads the linked page with appropriate data.

Defect 195639: VMware Dashboard - Incorrect breadcrumb updates from Resource Relationship  
**Problem Description:**  
1. Breadcrumb doesn't get appropriate updates / links when there are multiple to and fro done on the resource relationship views for various components.  
2. For standalone server, since there is no 'Cluster Group' page, clicking on 'Connected Clusters' on the datastore resource relationship view doesn't display any data. It just adds the non-functional link to the breadcrumb.  
**Workaround:** Going back to home page (by clicking 'Home' on the breadcrumb) cleans up the breadcrumb and displays appropriate data.
Defect 195642: VMware Dashboard - Chart doesn't get displayed for some of the components

**Problem Description:** When the data returned contains 'Unavailable' or 'Undefined' values for any of the charts, that chart doesn't get loaded (as chart supports only 'numbers').

**Workaround:** If data is available in proper format on the agent end, charts load appropriately.

Defect 71428: VMware Dashboard

**Problem Description:** 'Virtual Machine view' does not show Manually Added VMs.

**Workaround:**
1) Adding OS Name value while adding a fictitious VM works as a workaround.
2) If VM is already added, running the following query on db server will restore the view of all fictitious (Manually) VMs added.
   
   ```sql
   UPDATE TADFDC.CFG_VIRTUAL_MACHINE SET OPERATING_SYSTEM_NAME='some_value' WHERE OPERATING_SYSTEM_NAME IS NULL.
   ```

Defect 71436: VMware Capacity Planner

**Problem Description:** DMLoader fails if installed 'Capacity Planner' and 'Dashboard'.

**Workaround:** Updating password field in 'Connection Manager' with correct value will work as workaround.

Defect 71435: VMware Capacity Planner

**Problem Description:** Few Buttons in CP UI are not working if clicked on their edges of buttons.

**Workaround:** Click on the center of buttons.

Defect 70356: VMware Capacity Planner

**Problem Description:** Problem in viewing contents of 'Current Environment Report' in browser and in pdf.

Defect 71373: VMware Capacity Planner

**Problem Description:** Reinstall of Capacity Planner fails on windows.

**Workaround:** After 'Uninstall' of Capacity Planner, restart the Machine and then reinstall CP.

Defect 71566: VMware Capacity Planner

**Problem Description:** Sometimes DMLoader fails with 'timeout' error in DMLoader.log

**Workaround:** Try 'Load Config' again.

Defect 71562: VMware Capacity Planner
**Problem Description:** Sometime DMLoader.log shows
"ERROR - ADL00015E: Query execution failed.
com.ibm.db2.jcc.am.SqlSyntaxErrorException: DB2 SQL Error:
SQLCODE=-104, SQLSTATE=42601, SQLERRMC=END-OF-
STATEMENT;6 AND
DATA_STORE_PK=;<update_source_no_row_query"

**Workaround:** None

Defect 71538: PowerVM Capacity Planner - Recommended Sizing Plan Report is not getting launched from the PowerVM planning center page

**Problem Description:** The Planning Center link for Recommended Sizing Plan Report in step 5 launches a blank report which says coming soon. The report is available in the reports package, but the link is not updated

**Workaround:** The report can be launched from the Sizing summary page which says "Power VM sizing complete." displayed at the end of the Generate Plan action. Report is also available in the Common Reporting -> IBM Infrastructure Management Capacity Planner Reports for VMware package

Defect 71549 - PowerVM Capacity Planner - In recommended sizing report, after converting to PDF, it shows first two pages as blank

**Problem Description:** When the Recommended sizing report is exported to PDF, the first two pages are blank, and the content is available from page 3 onwards.

**Workaround:** The recommendations can be viewed from page 3 onwards

Defect 71527 - PowerVM Capacity Planner - In the LPAR sizing wizard, if any fictitious or discovered Managed system is selected on which no LPARs are hosted, the error message displayed by the WLE wizard is not informative

**Problem Description:** If a Managed System which have no LPARs associated with it is selected in the Working Set for sizing and the Sizing Wizard is launched using Generate Plan option, the user is presented with a screen saying "Error occurred --> Try again". The error should display something like “No LPARs / Workload available on selected Managed System” which indicates to the user the cause of no data.

**Workaround:** To avoid this error, only the Managed Systems with associated LPARs should be selected for sizing optimization. User can navigate to Managed Systems Inventory view under Edit Current Environment and deselect the Managed system having no LPARs

Defect 71528 - PowerVM Capacity Planner - If "Existing Model" option selected during sizing and the resource demand for CPU / MEM is exceeding the capacity of the existing model, it shows "Mismatch-null" message.

**Problem Description:** In the Sizing wizard, on the "Choose Base system" page, if user selects the "Existing System" option, and the resource sizing used are exceeding the resources available on the Managed System, then we get a
"Mismatch Null" message on the "Immediate solution" page. The message should say “Current selected Model can not accommodate selected workloads”.

**Workaround:** User can try to generate the sizing using the Base system selection options to "Choose a new model based on typical migration paths" or "Allow the system selection algorithms to choose the best system"

Defect 72135 - Capacity Planner Reports for PowerVM – Recommended Environment report shows no data.

**Problem Description:** After running the Planning Center steps for PowerVM, if a user runs the PowerVM Recommended Environment report, no data is returned.

**Workaround:** None

**Troubleshooting Tips:**

**Observed Behavior:** db2 create wrapper net8 command fails with the message “SQL10013N The specified library "libclntsh.so" could not be loaded. SQLSTATE=42724”

**Reason:** If Oracle client is installed as a different user, db2inst1 won't have permission to access $ORACLE_HOME/lib folder. Db2 create wrapper net8 will try to load libclntsh.so present in that directory and the operation will fail.

**Workaround:** Provide access to $ORACLE_HOME folder for user db2inst1

For example: chmod o+rx /home/oracle

**5.0 Key Issues Resolved in this Beta**

Defect XAP-983: XenApp Agent Workergroup enumeration fails

**Problem description:** When WorkerGroups are assigned to Active Directory Organizational Units, WorkerGroups associations were not calculated correctly. Workspaces affected were populated by empty data:

- FRM subnode, top-level workspace, Server Details view
- FRM subnode, Farm workspace, Server Details view
- FRM subnode, Worker Group workspace, all views

Defect XAP-986: Remote Farm Zone information missing

**Problem description:** Citrix PowerShell SDK v6.5 command Get-XAZone raises an exception when called as a user with read-only administrative permissions. Workspaces affected were populated by empty data:

- FRM subnode, top-level workspace, Server Details view
- FRM subnode, Farm workspace, Server Details view
- FRM subnode, Farm workspace, Farm Summary view
- FRM subnode, Farm workspace, Additional Farm Summary view
- FRM subnode, Zone workspace, all views
Appendix A

*PowerVM Federation: ITM Attribute Groups to be enabled for warehousing and summarization*

<table>
<thead>
<tr>
<th>Attribute Group</th>
<th>Agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>KPK_MON_UNMON_ALLOC</td>
<td>CEC</td>
</tr>
<tr>
<td>KPK_GLOBAL_CEC</td>
<td>CEC</td>
</tr>
<tr>
<td>KPK_MON_LPARS</td>
<td>CEC</td>
</tr>
<tr>
<td>KVA_DISKS</td>
<td>VIOS</td>
</tr>
<tr>
<td>KVA_NETWORK_ADAPTERS_RATES</td>
<td>VIOS</td>
</tr>
<tr>
<td>KVA_NETWORK_MAPPINGS</td>
<td>VIOS</td>
</tr>
<tr>
<td>KVA_STORAGE_MAPPINGS</td>
<td>VIOS</td>
</tr>
</tbody>
</table>
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