

A decorative banner consisting of a grid of colored squares in shades of green, blue, and red. A large white arrow points from the right side of the grid towards the top right corner of the page.

# Custom Data Adapter SDK™ 2.0 for Data Manager 4.3 Release Notes

May, 2011

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## 1.0 New features in Custom Data Adapter SDK 2.0

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The Hyperformix<sup>®</sup> Custom Data Adapter SDK provides a set of example files and instructions to create custom Data Adapters for use with Hyperformix Data Manager<sup>®</sup> version 4.3.

The toolkit and the Custom Data Adapter XML schema (**DST\_4\_3.xsd**) have been enhanced to include the following information:

- Additional configuration metrics for servers and virtual machines (VMs).
- Logical grouping support for servers, VMs, workloads, and so on.

### 1.1 New configuration metrics

The toolkit and the Custom Data Adapter XML schema (**DST\_4\_3.xsd**) have been enhanced to include the following additional configuration metrics for servers and VMs:

**Note:** In Data Manager 4.3, a new table called **entity\_config** has been added to store the configuration metrics for all entities (such as servers, VMs, clusters and so on). This table also maintains the configuration items separately for each data source type, which was not done on the existing configuration tables (such as **server\_dim**, **server\_virtual\_dim** and **cluster\_dim**). The new configuration items (listed in this section) can be migrated only to the new **entity\_config** table and not into the existing configuration tables. However, the older tables continue to exist and will be populated with the configuration metrics that were supported prior to the Data Manager 4.3 release. For more information, see the *Data Manager Administration Guide*.

#### Physical server configuration metrics

The following configuration metrics for physical servers are now supported.

- **cores\_per\_processor\_chip** : Number of CPU cores per socket (chip) .
- **hardware\_family** : Hardware family name of the physical server.
- **hardware\_vendor** : Vendor name of the physical server.
- **num\_network\_interfaces** : Number of NIC interfaces on the physical server.
- **num\_processor\_chips** : Number of CPU sockets (chips) installed in the server.
- **processor\_family** : Name of the CPU family name (such as Pentium, Power 6, and so on).
- **threads\_per\_processor\_core** : Number of processing threads in a CPU core.
- **tlp\_enabled\_flag** : Flag indicating whether thread-level processing is enabled.

### 1.1.1 Virtual machine configuration metrics

The following configuration metrics for VMs are now supported.

- **num\_logical\_processors**: Number of logical CPUs in the VM.  
For virtualization solutions (such as VMware) on which the thread-level processing (TLP) is not enabled at the VM level, this value equals the number of virtual CPUs (VCPUs). For virtualization solutions (such as IBM PowerVM) on which thread-level processing (TLP) can be enabled at the VM level, this value equals the number of VCPUs multiplied by the number of threads per CPU core.
- **threads\_per\_processor\_core**: Number of processing threads per CPU core if TLP can be enabled at the VM level.
- **tlp\_enabled\_flag** : Flag indicating whether the thread-level processing is enabled at the VM level.

## 1.2 Logical grouping

Data Manager 4.3 and the Custom Data Adapter SDK support logical grouping of entities, including servers, VMs, clusters, hosts, workloads, and so on. These groupings can be organized in either a flat or hierarchical structure, and an individual entity can belong to multiple logical groups. For example, a server might belong to a grouping hierarchy of a country, state, and city.

The following new example Data Adapter and data files have been added to support logical grouping:

- group\_by\_country\_da.xml
- GroupByBusinessService.csv
- GroupByCountry.csv
- GroupByDatacenter.csv

**Note:** The CSV data files can be loaded using the updated **generic\_csv\_template.xml** Data Adapter. The new **group\_by\_country\_da.xml** example Data Adapter loads the data contained in **GroupByCountry.csv**.

## 1.3 Updated example files and documentation

The existing example Data Adapters, source data files, XML schema, and schema documentation have been updated to reflect the new server and VM configuration metrics. The files have also been renamed and annotated for greater ease of use. The *Custom Data Adapter SDK Reference Guide* has been updated and reorganized for greater clarity and ease of use.

## 2.0 About the Custom Data Adapter SDK

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The Hyperformix<sup>®</sup> Custom Data Adapter Software Development Kit (SDK) provides a set of example files and instructions to create custom Data Adapters for use with Hyperformix Data Manager<sup>®</sup>. Custom Data Adapters are required to gather data from data sources other than those directly supported by Hyperformix.

### 2.1 Prerequisites

You must meet the following prerequisites to create a custom Data Adapter using the Custom Data Adapter SDK 2.0 toolkit:

- You must have Data Manager 4.3 installed to be able to import a Data Adapter written with the new specifications.
- All custom Data Adapters that you create using this kit must be designated as version 4.3 in order to validate with the new custom Data Adapter schema file (DST\_4\_3.xsd)

### 2.2 What's in the kit

The contents of the Custom Data Adapter SDK 2.0 kit are contained in a zip file called **Custom\_Data\_Adapter\_SDK\_2\_0\_0\_DM.zip**. This zip file contains the following items:

#### Template and example files

The Custom Data Adapter SDK includes template and example Data Adapter files, example data, the Data Manager XML schema and schema documentation. For a complete list of files, see the *Custom Data Adapter SDK Reference Guide*.

#### Documentation set

The Custom Data Adapter SDK includes a set of release notes (this document) and the *Custom Data Adapter SDK Reference Guide*.

### 2.3 Hyperformix product compatibility

The Custom Data Adapter SDK 2.0 is compatible with Data Manager version 4.3.

## 3.0 Known issues

When creating custom Data Adapters, you might encounter the following known issues.

**Note:** Hypermix reviews and updates these known issues each month. To view the current known issues and possible workarounds, see the product page on the Technical Support Web site.

Item #	Known issue
DE1639	<p data-bbox="367 579 516 611"><b>Description</b></p> <p data-bbox="367 632 1373 695">Variable names that are substrings of each other cause errors when data is loaded. For example, the following two variables cause expression parsing errors:</p> <ul data-bbox="415 716 626 779" style="list-style-type: none"><li data-bbox="415 716 553 747">• busy_pct</li><li data-bbox="415 747 626 779">• phys_busy_pct</li></ul> <p data-bbox="367 800 537 831"><b>Workaround</b></p> <p data-bbox="367 852 1341 936">To ensure that data can be loaded correctly, you must ensure that no variable is a substring of another. For example, to correct the above variables, you could use the following names:</p> <ul data-bbox="415 957 643 1020" style="list-style-type: none"><li data-bbox="415 957 643 989">• logical_busy_pct</li><li data-bbox="415 989 626 1020">• phys_busy_pct</li></ul>

## 4.0 Contact CA Technologies

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- Online and telephone contact information for technical assistance and customer services
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