

VISUAL CONFIGURATION EXPLORER



Agenda

- Motivation for Visual Configuration Explorer (VCE) ?
- Value of VCE
- IBM Support Assistant
- VCE Overview
 - Search
 - Compare
 - Validate
 - Headless Operation
 - Diagrams
- VCE Terminology
- Architecture
- Demo
- Questions

Motivation for Visual Configuration Explorer ?

■ Free Tool (Tech Preview)

- Reduce time to understand System Configuration
- Quicker navigation to specific pieces of configuration data
- Quickly validate configuration (comparison/validation rules)

■ Increase Customer Satisfaction

- Help IBM Support reduce time needed to solve customer problems
- Make it easier for customers to solve configuration related issues

■ Other VCE Benefits

- Use in other tools : Headless script operation
- Use in Testing (functional, performance..), Deployments etc.

Fixing problems ...

... is much easier with the right tool for the job!

Value of VCE

- Uniform Visualization of Multiple Product Configuration information
- Compact, complete, and logical structure of the data (topology objects, relationships, properties)
- Cross-product relationships
- Sophisticated exploration aids – diagramming, searching, comparing and validating
- Extensible drawing aids – templates
- Automation Framework – Headless CLI-based automation of VCE function

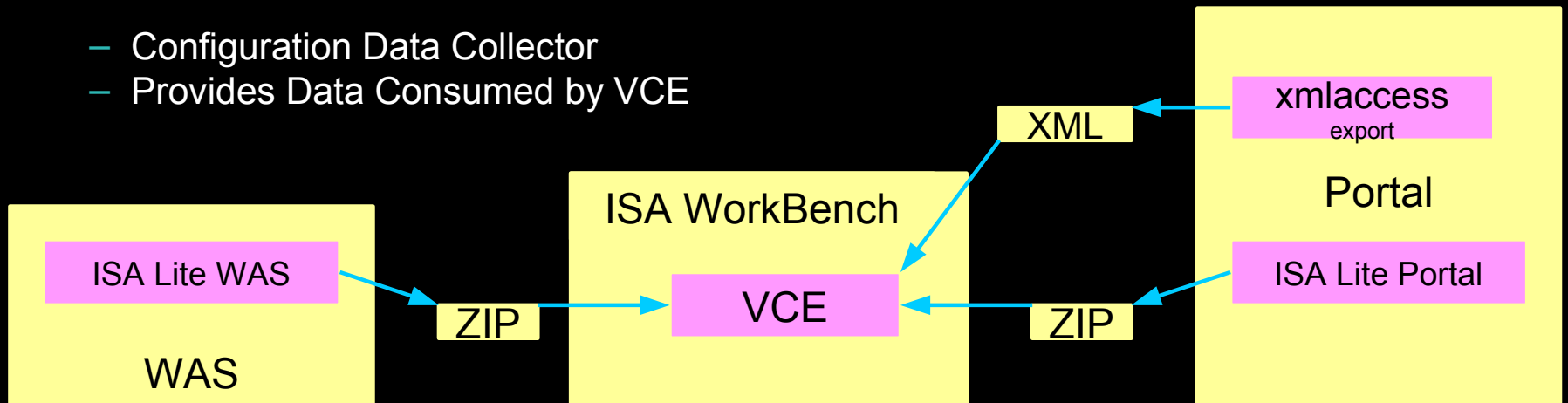
IBM Support Assistant

ISA Workbench

- Provides the “toolbox” in which analysis tools reside (e.g. VCE)
- The place to go for Serviceability Tools across product families
- Assist with opening PMRs and working with IBM Support
- Product information to locate APARs and fixes
- Search feature to query IBM and non-IBM knowledge banks

ISA Lite

- Configuration Data Collector
- Provides Data Consumed by VCE

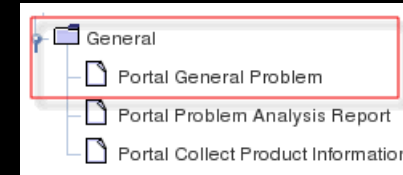


IBM Support Assistant

■ Configuration Data Collection Tools

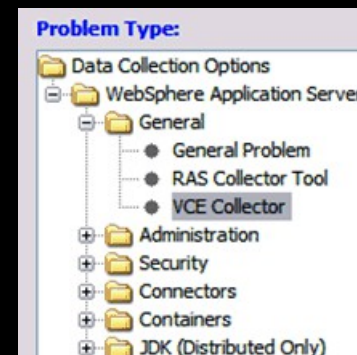
– WebSphere Portal

- ISA Lite for WebSphere Portal v6.x v7.x (OK for VCE)
- ISA Data Collector for WebSphere Portal v8.x (?)
- xmlaccess export (OK for VCE)



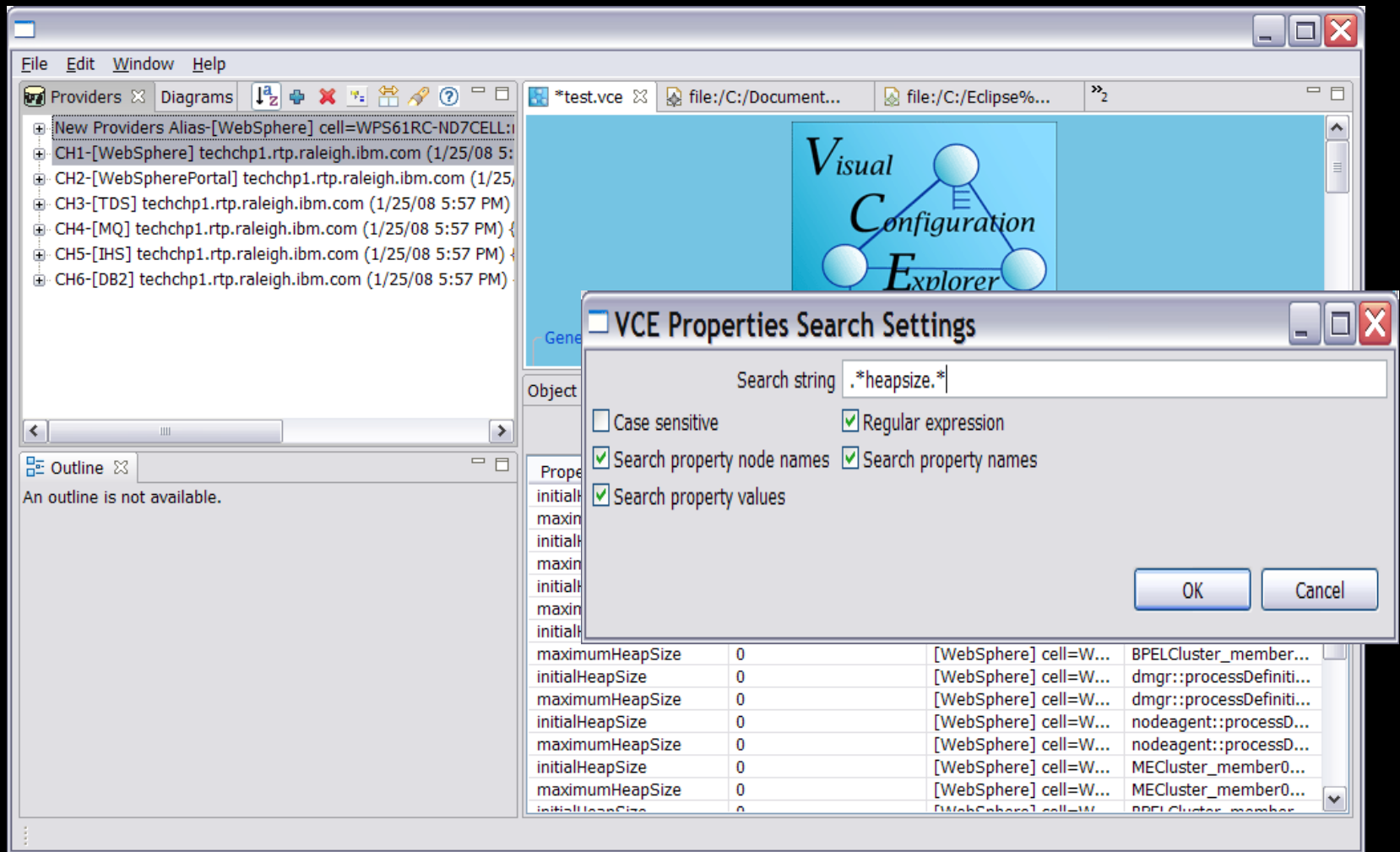
– WebSphere Application Server

- ISA Lite for WAS v6.x v7.x v8.0 (OK for VCE)
- ISA Data Collector for WAS v6.x v7.x v8.0 (?)
- Data Collection Tools for WAS 8.5 (incompatible with VCE)
- "collector" for WAS - deprecated as of WAS v7 (incompatible with VCE)

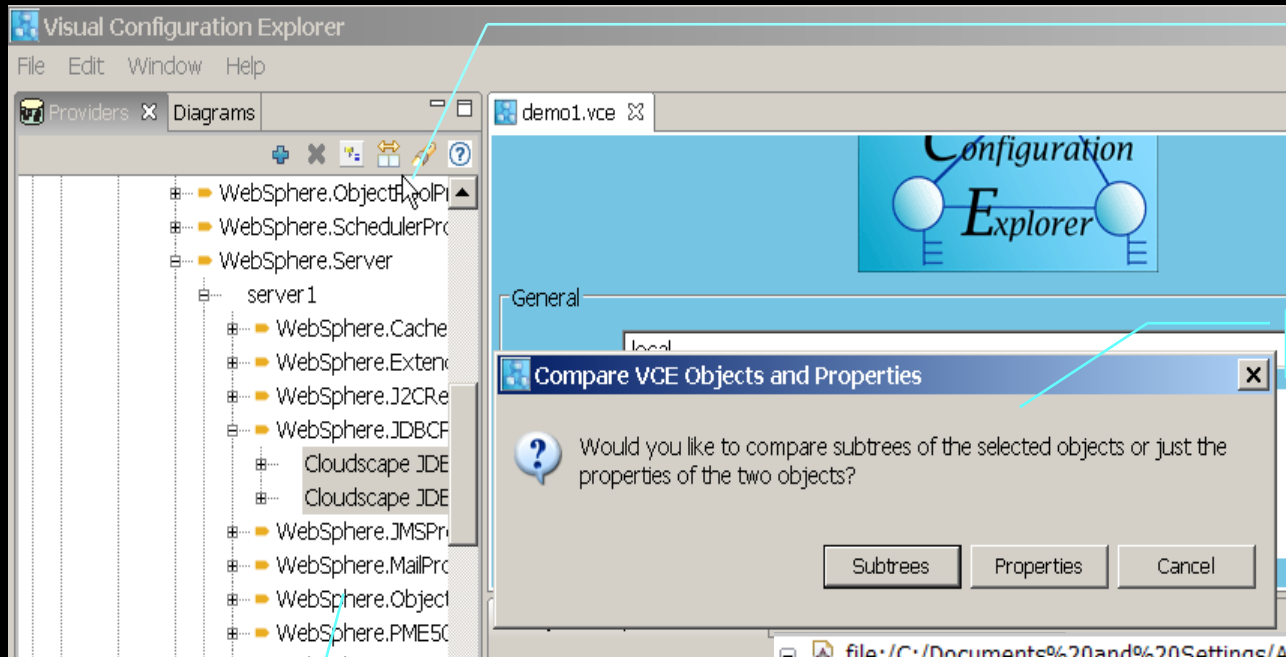


VCE OVERVIEW - Search

- Powerful Scoped Searching



VCE OVERVIEW - Compare

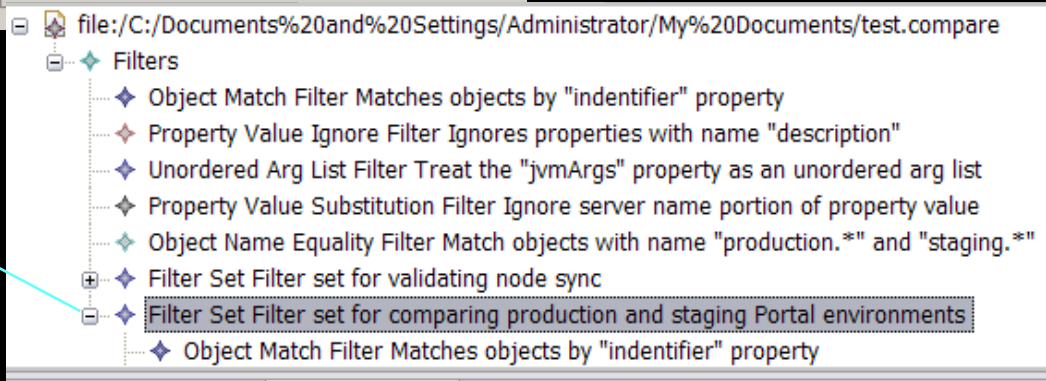


2. Compare Tool

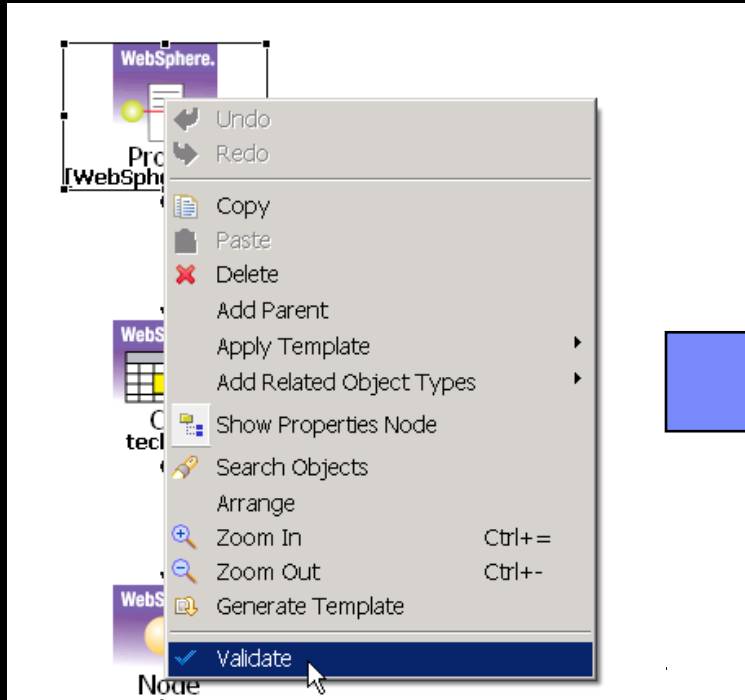
3. Choose Scope

1. Select

4. Customizable filters



VCE OVERVIEW - Validate



A screenshot of a 'Validation Results' window. The window contains a table with the following data:

Severity	Rule Name	Target	Message
Warning	Non Default Log Level D...	server 1	The log level detail has a non-default value services[2]::startupTraceSpecification: *=all=disabled
Info	Verbose mode garbage c...	server 1	Verbose mode garbage collection is recommended for serviceability jvmEntries[0]::verboseModeGarbageCollection: false
Warning	Non Default Log Level D...	WebSphere_Portal	The log level detail has a non-default value services[2]::startupTraceSpecification: *=all=disabled
Info	Verbose mode garbage c...	WebSphere_Portal	Verbose mode garbage collection is recommended for serviceability

VCE OVERVIEW - Headless

- Headless Runtime can be installed directly on target systems
 - ANT-based scripting drives VCE function from CLI
 - Allows integration with other roll-your-own or formal systems management infrastructures

```
</description>
<!-- Default main target for automation-example. -->
<target name="main" depends="initProps" description="Main target for automation-example.">
  <!--Call the WebSphere Exporter-->
  <ant antfile="wasexporter\wasexport.xml" />
  <antcall target="createWorkspace" />
  <antcall target="createProviders" />
  <antcall target="exportConfig" />
  <antcall target="createAppServerDiagram" />
  <antcall target="validateConfig" />
  <vce.saveWorkspace workspace="ws1" />
</target>
```

```
createWorkspace:
  [echo] Creating workspace foo.vce
[vce.createWorkspace] File model 'ws1' exists -- overwriting it.

createProviders:
  [echo] Creating providers from c:\bofa\vce\wasconfigs\foo.configuration using current
[vce.createProviders] Creating provider at relative path ${workspace.path}/wasconfigs/foo.configuration

exportConfig:
[vce.query] Query found 237 objects
[vce.query] Query results written to C:\bofa\vce\foo.export.xml

createAppServerDiagram:
[vce.createDiagram] Adding 3 objects to diagram.

validateConfig:
[vce.validate] Wrote validation results to file C:\bofa\vce\foo.validate.xml

BUILD SUCCESSFUL

BUILD SUCCESSFUL
Total time: 2 minutes 56 seconds
```

VCE OVERVIEW - Diagrams

The screenshot displays the IBM Support Assistant Workbench interface. The main window is titled "Configurations - IBM Support Assistant Workbench" and shows a "Visual Configuration Explorer (Tech...)" window. The diagram illustrates the application topology for a WebSphere environment, showing a central "Deployment wmmApp" node connected to various components:

- WorkClasses:** "WorkClass Default_I10P_WC" and "WorkClass Default_JMS_WC" are connected to the "Deployment wmmApp" node via "EAR" dependencies.
- ServerCluster:** "ServerClst NG001DC000" is connected to the "Deployment wmmApp" node via "EAR" dependencies and is part of a "cluster".
- DataSources:** "DataSrc Common_DB2_00" is connected to the "Deployment wmmApp" node via "ds" dependencies. There are also "JDBCPrvdr wpdbJDBC_db2" nodes connected to the "DataSrc Common_DB2_00" nodes.
- Other Components:** "WebSphere. JDBCProvider", "WebSphere. JMSProvider", and "WebSphere. MailProvider" are also visible in the diagram.

The left sidebar shows a tree view of configurations, including "Production [WebSphere]", "Staging [WebSphere]", and "WebSphere.Cell". The bottom panel displays "Object Compare Results (409 differences detected)" with a list of configuration differences between various cells and nodes.

VCE TERMINOLGY

- **VCE Workspace**

- A local file for caching, saving and personalizing information
- The VCE client allows the user to create/open multiple workspaces

- **Provider**

- Source of topology and configuration data
- Currently WAS, Portal and xmlaccess export supported well
- Out of date? : DB2, IBM Tivoli Directory Server, IHS, and WebSphere MQ
- The user adds one or more providers to a workspace
- Next release: wimconfig.xml support, Connections Provider ?

- **Topology Objects and Relationships**

- Normalized representation of configuration data - Created by providers

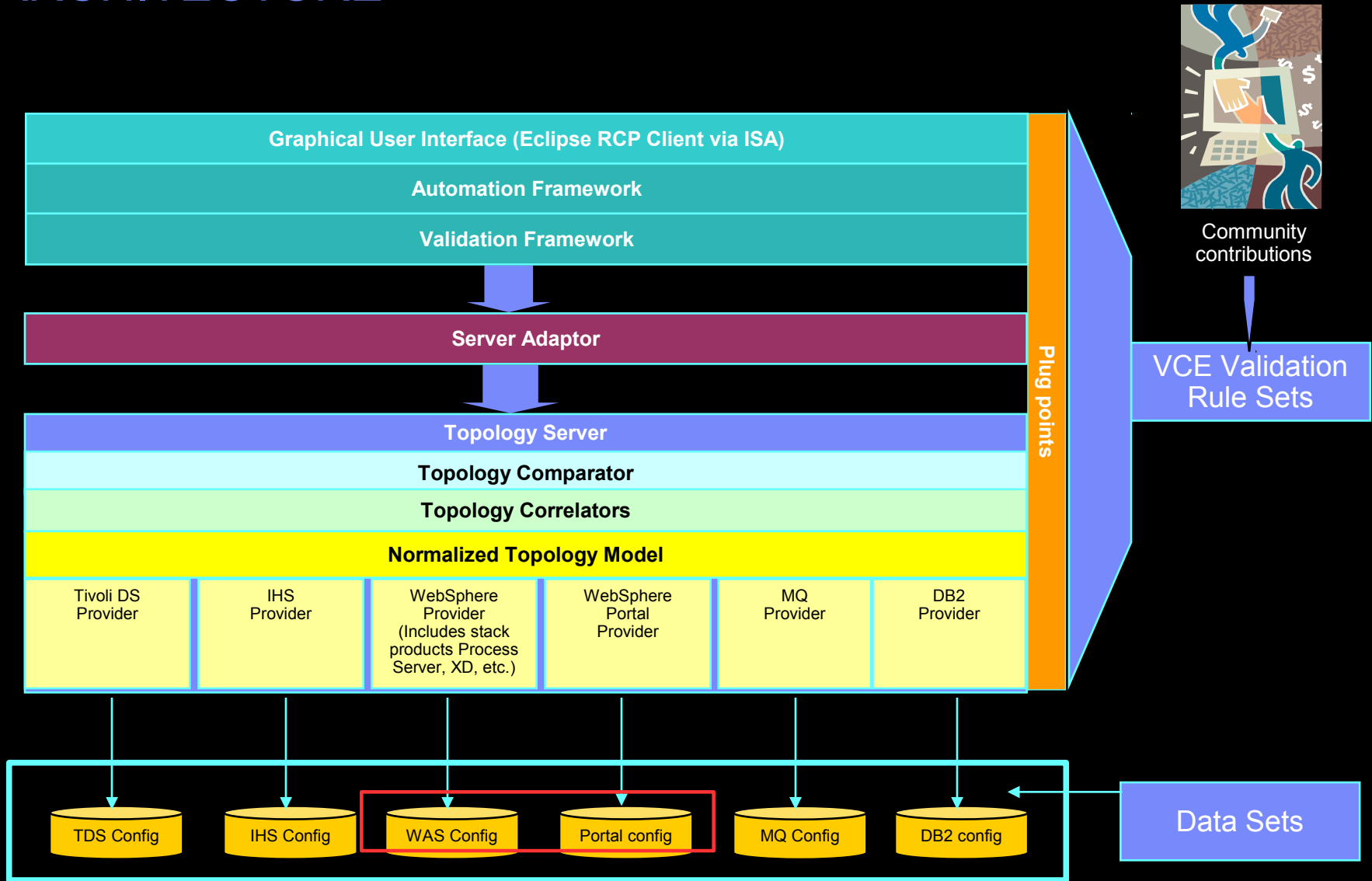
- **Properties**

- Detailed information for a topology object instance; Conceptually a tree of tables

- **Diagrams**

- Visualization of topology objects and relationships

ARCHITECTURE



Demonstration

Where to find more information

- VCE Community on developerWorks

<https://ibm.biz/BdxZxq>

- IBM Support Assistant – WorkBench (→ VCE Tool Download)

<http://www.ibm.com/software/support/isa>

- IBM Support Assistant (ISA) Lite for WebSphere Portal

<http://www.ibm.com/support/docview.wss?uid=swg24008662>

- IBM Support Assistant (ISA) Lite for WebSphere Application Server

<http://www.ibm.com/support/docview.wss?uid=swg24020502>

Any Questions ?