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TWS for z/OS Update V8.6 General Overview

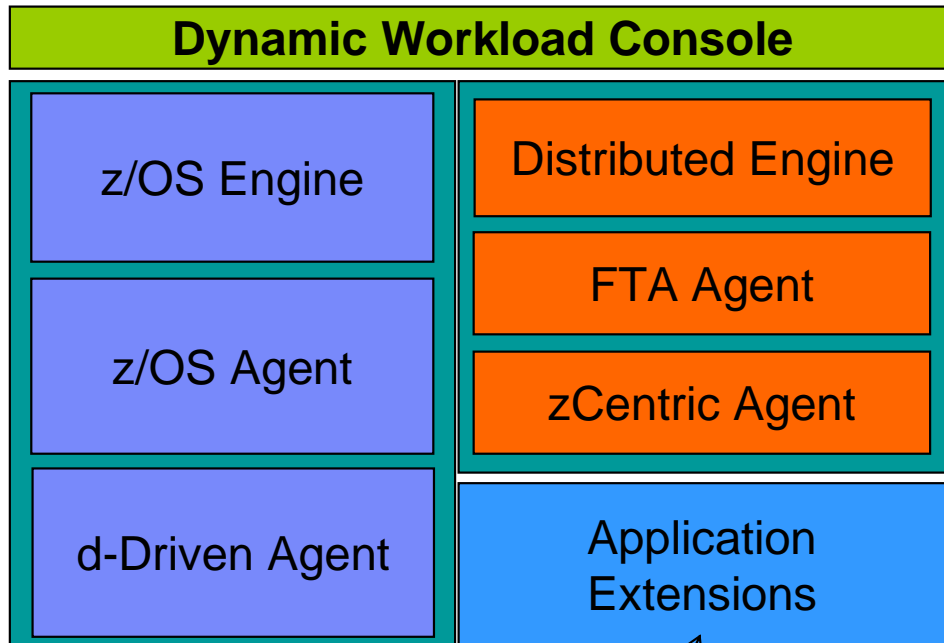
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Tivoli Workload Automation Overview

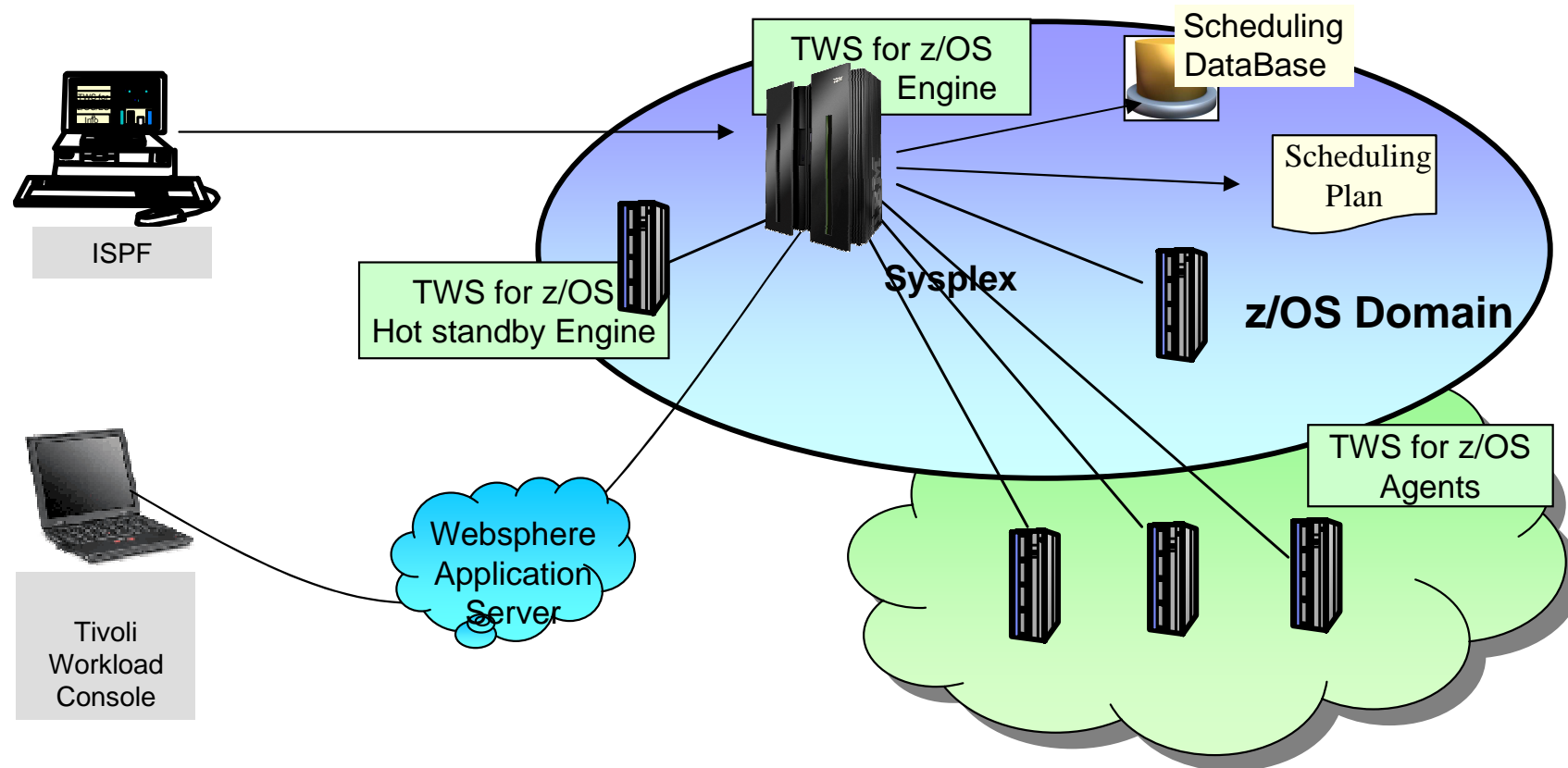
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IBM Batch scheduler: The Big Picture



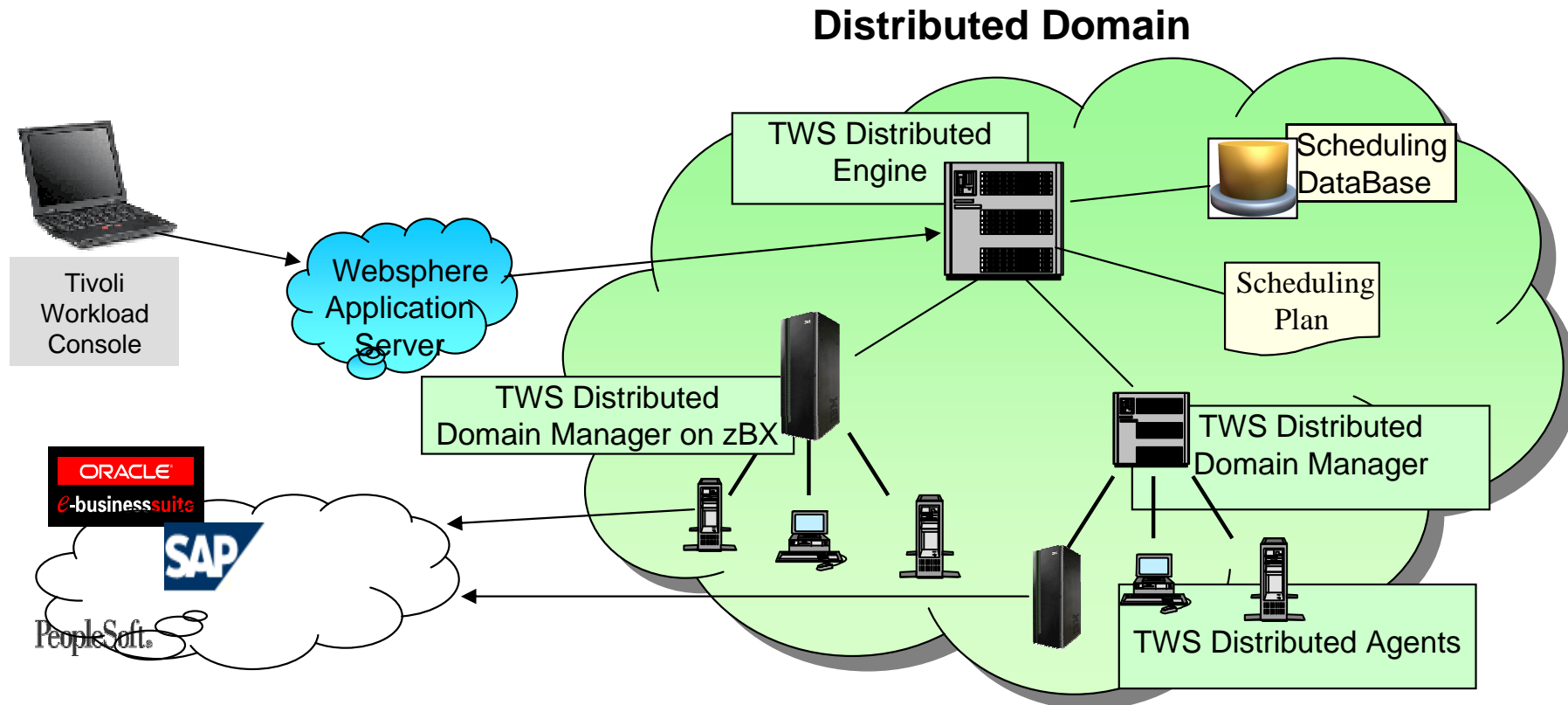
- IBM Tivoli Workload Scheduler
 - Distributed Scheduler (Maestro technology)
 - Dynamic Workload Console with distributed Connectors
 - Fault Tolerant Agent (Maestro technology)
 - zCentric static and dynamic Agents (new technology)
- IBM Tivoli Workload Scheduler for z/OS
 - z/OS Scheduler (OPC technology)
 - Dynamic Workload Console with the z/OS Connector
 - d-Driven z/OS Agent (new technology)
- IBM Tivoli Workload Scheduler for Applications
 - Application integration with SAP R/3
 - Application integration with Oracle e-Business Suite
 - Application integration with People Soft
 - Application integration for emerging workloads

TWS z/OS Configuration



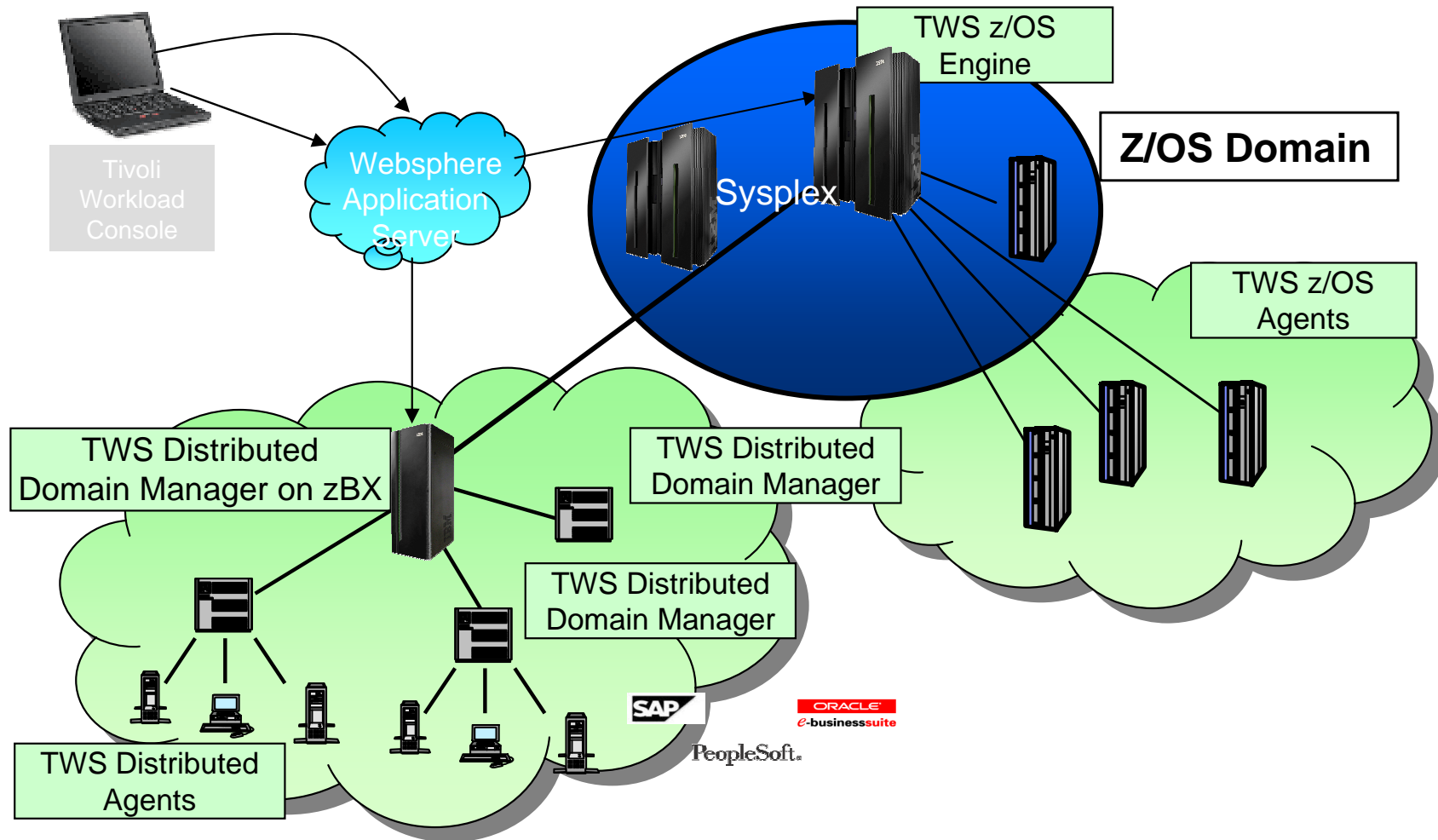
- Centralized Modeling and Control for z/OS only scheduling
- TWS for z/OS Engine
 - Owns the scheduling database, drives all the scheduling activities, and implements all Scheduling control logic
- TWS for z/OS Server
 - Manages communication with TWS components located outside the Controller Address Space
- TWS for z/OS Agents
 - Receives jobs to be executed by Engine, interface JES and SMF, sends back events to the Engine.
 - Connected to Engine via XCF, Shared DASD, TCPIP or SNA.

TWS Distributed Configuration



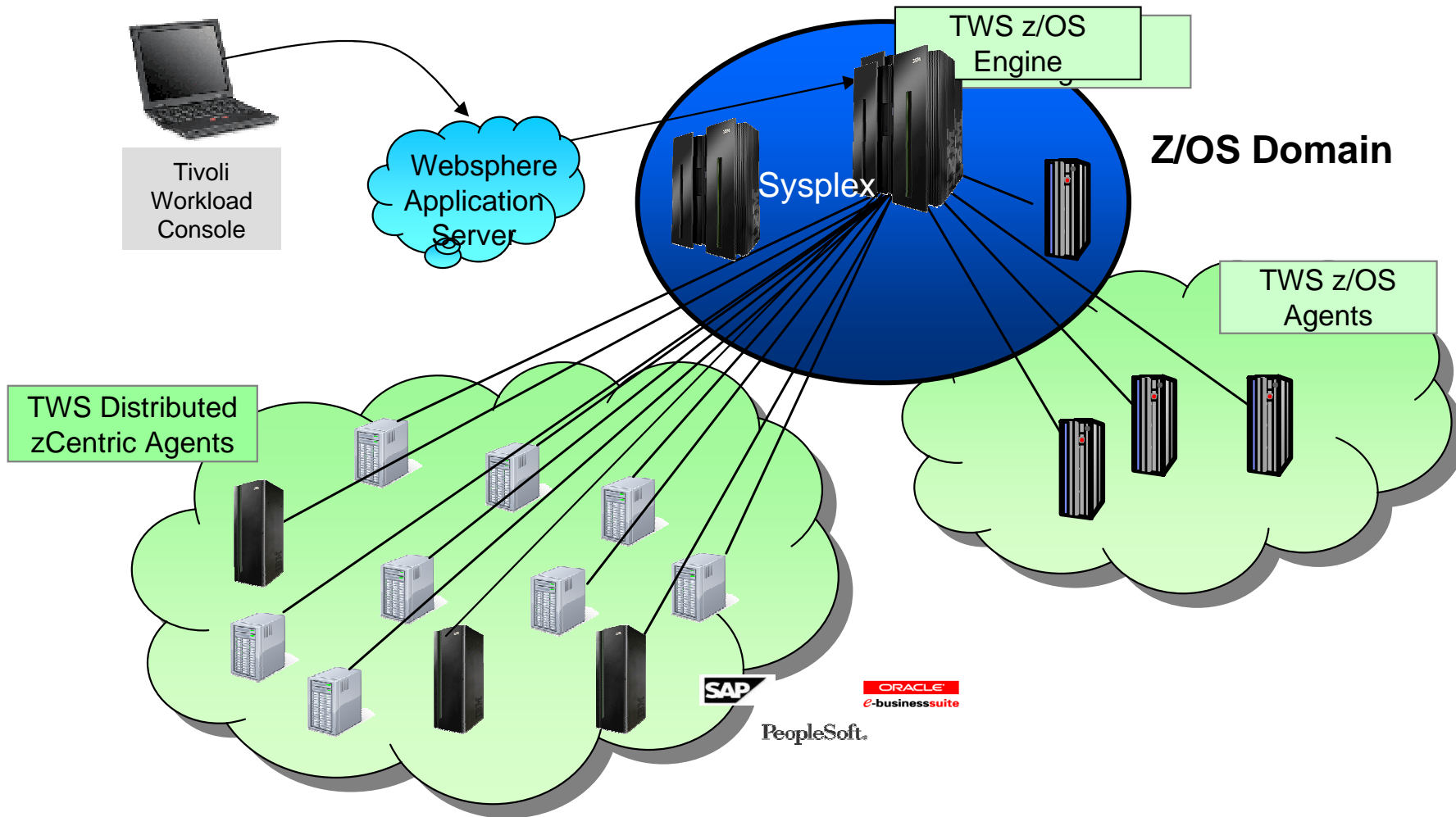
- Centralized Modeling and Control for Distributed only scheduling
- TWS Distributed Engine
 - Owns the scheduling database, collects events from the underlying Agents and resolves cross-domain dependencies
- TWS Distributed Agents
 - Intelligent agents capable to work autonomously
 - Connectivity to ERP applications

TWS Plan Based End-to-End Configuration



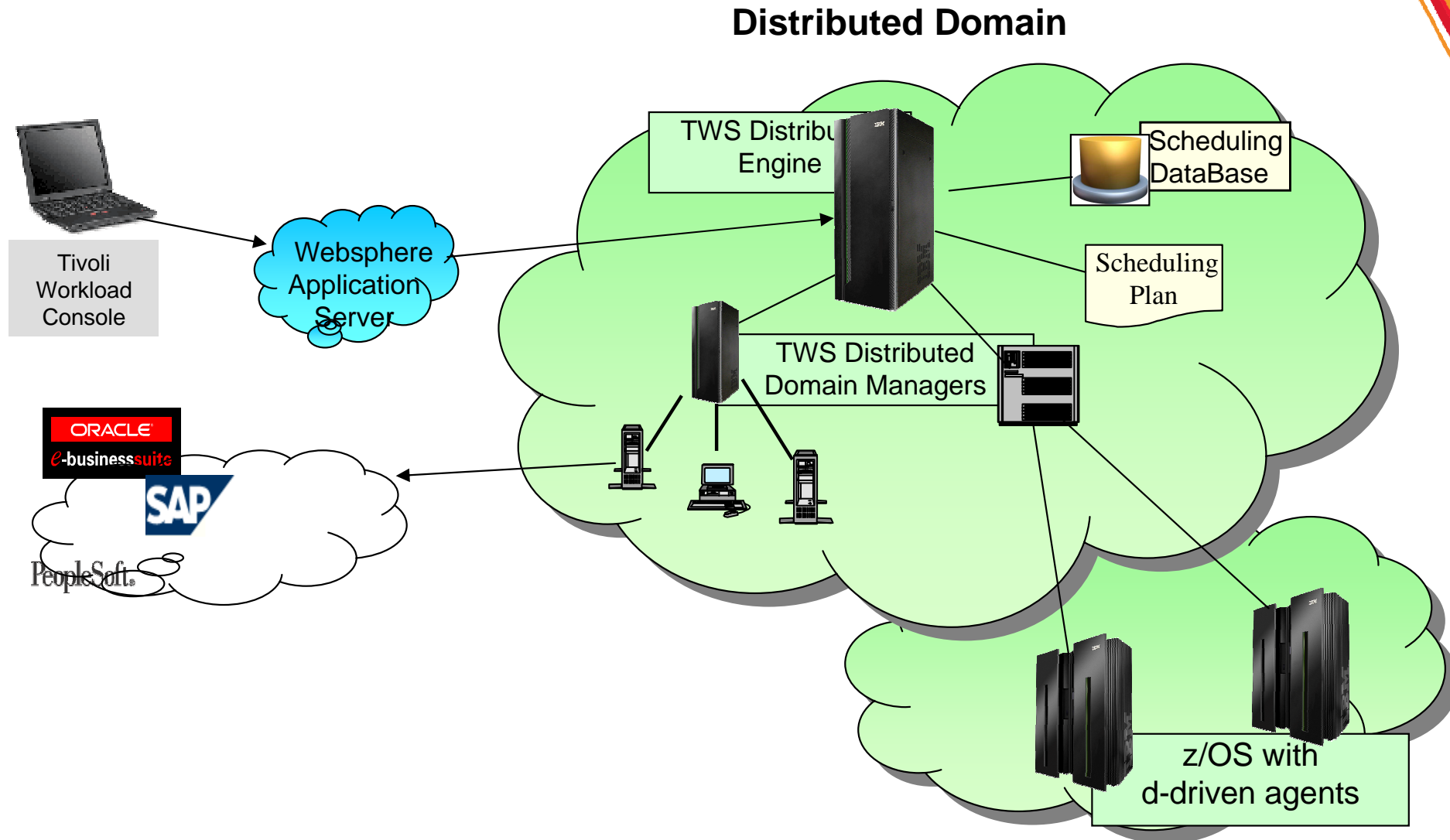
- Centralized Modeling and Control from z/OS environment for all Enterprise scheduling (z/OS and Distributed)

TWS zCentric End-to-End Configuration



- Centralized Modeling and Control from z/OS environment simple http protocol

TWS d-Driven End-to-End Configuration



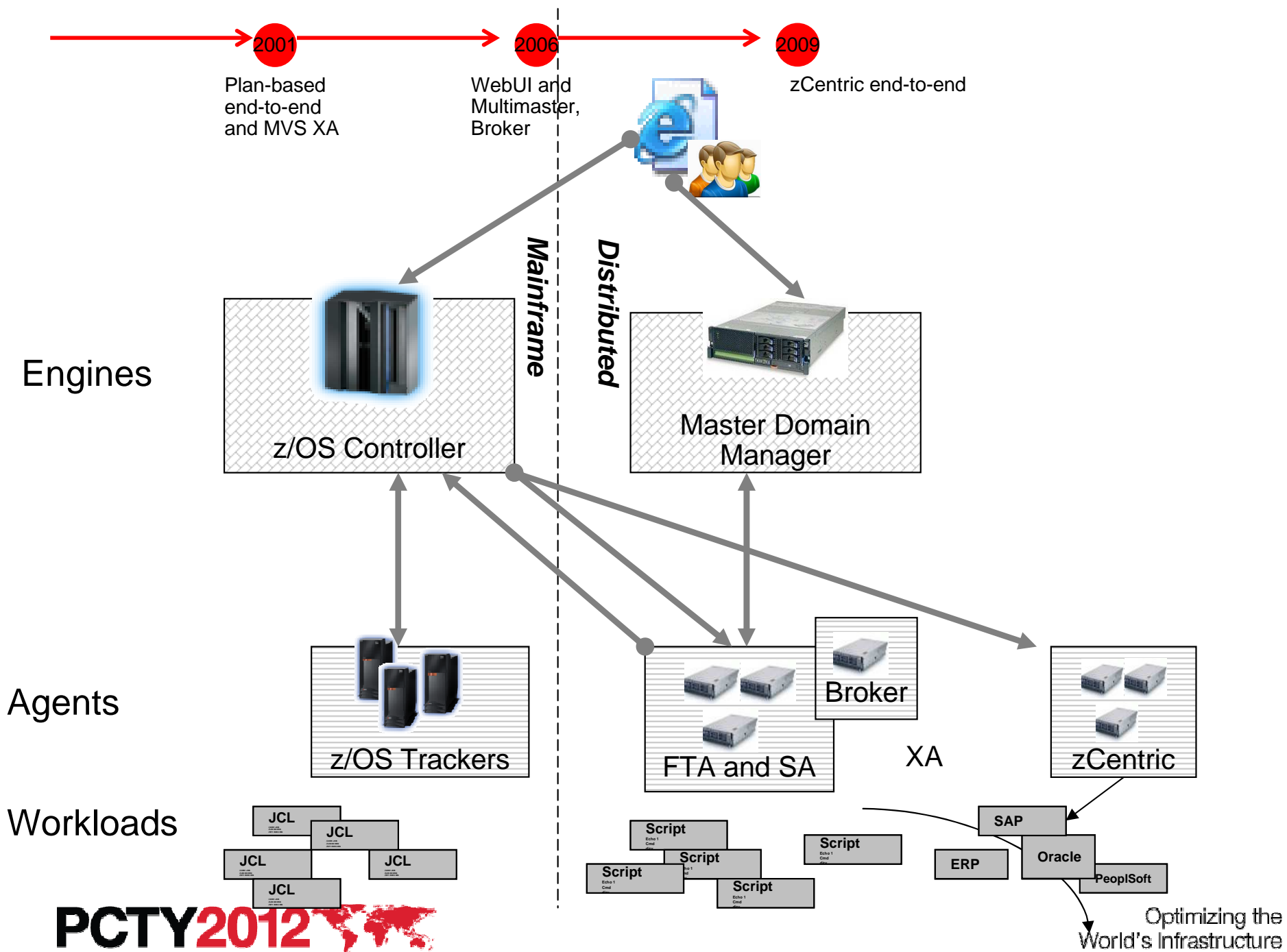
- Manage small z/OS batch environments through a Distributed Master Domain Manager



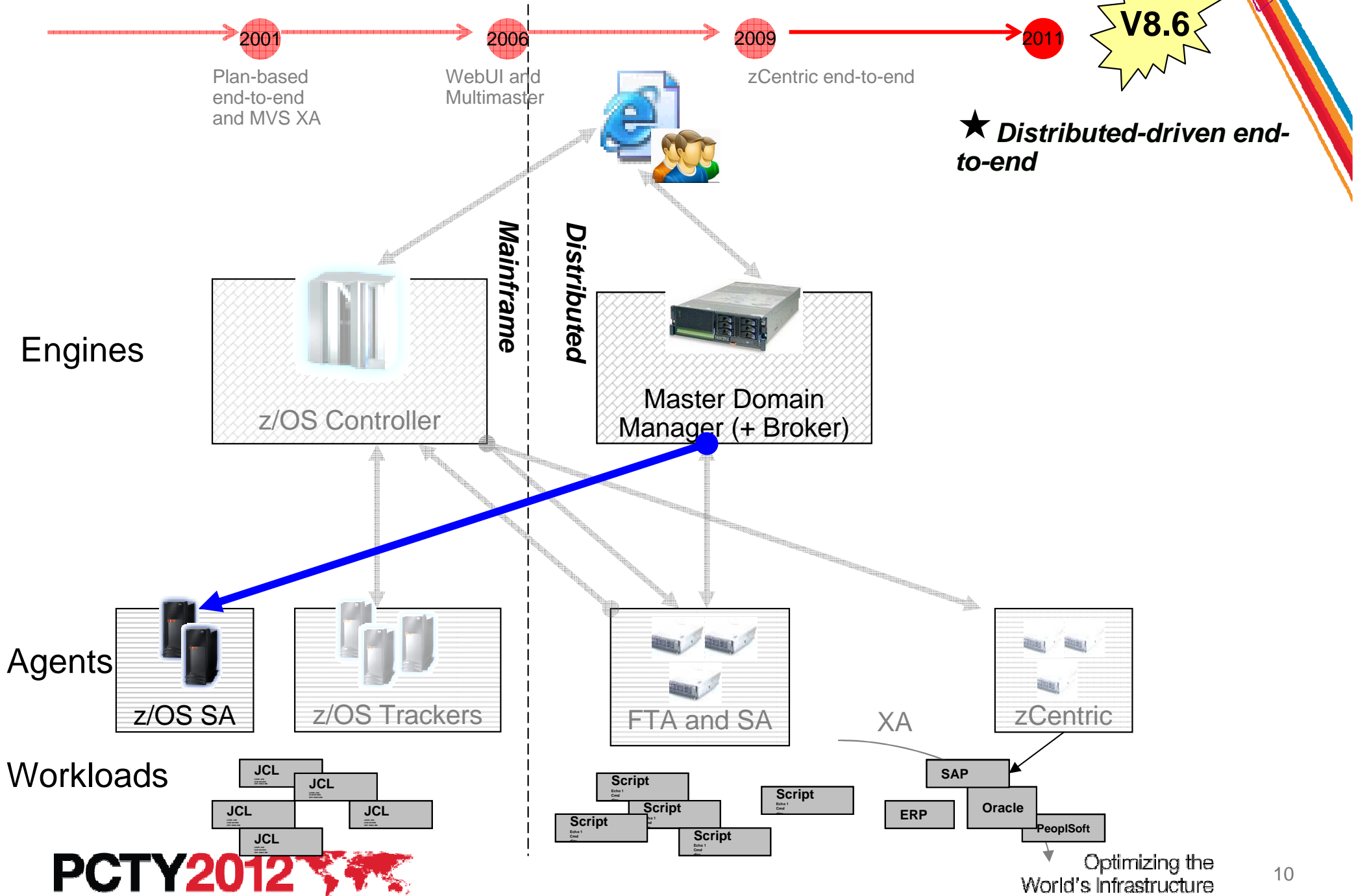
End to End Evolution

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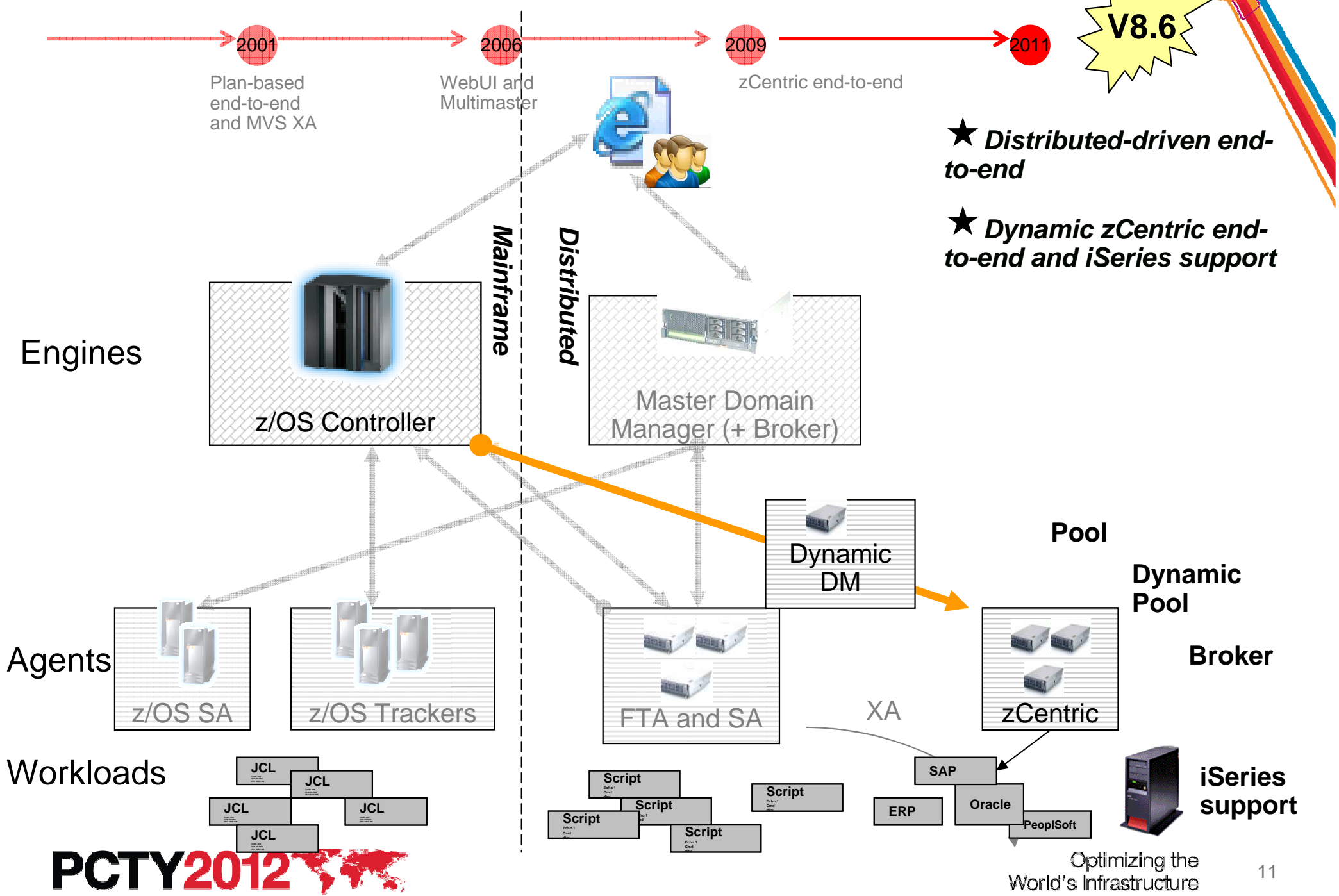
How Version 8.6 contributes to the end-to-end evolution



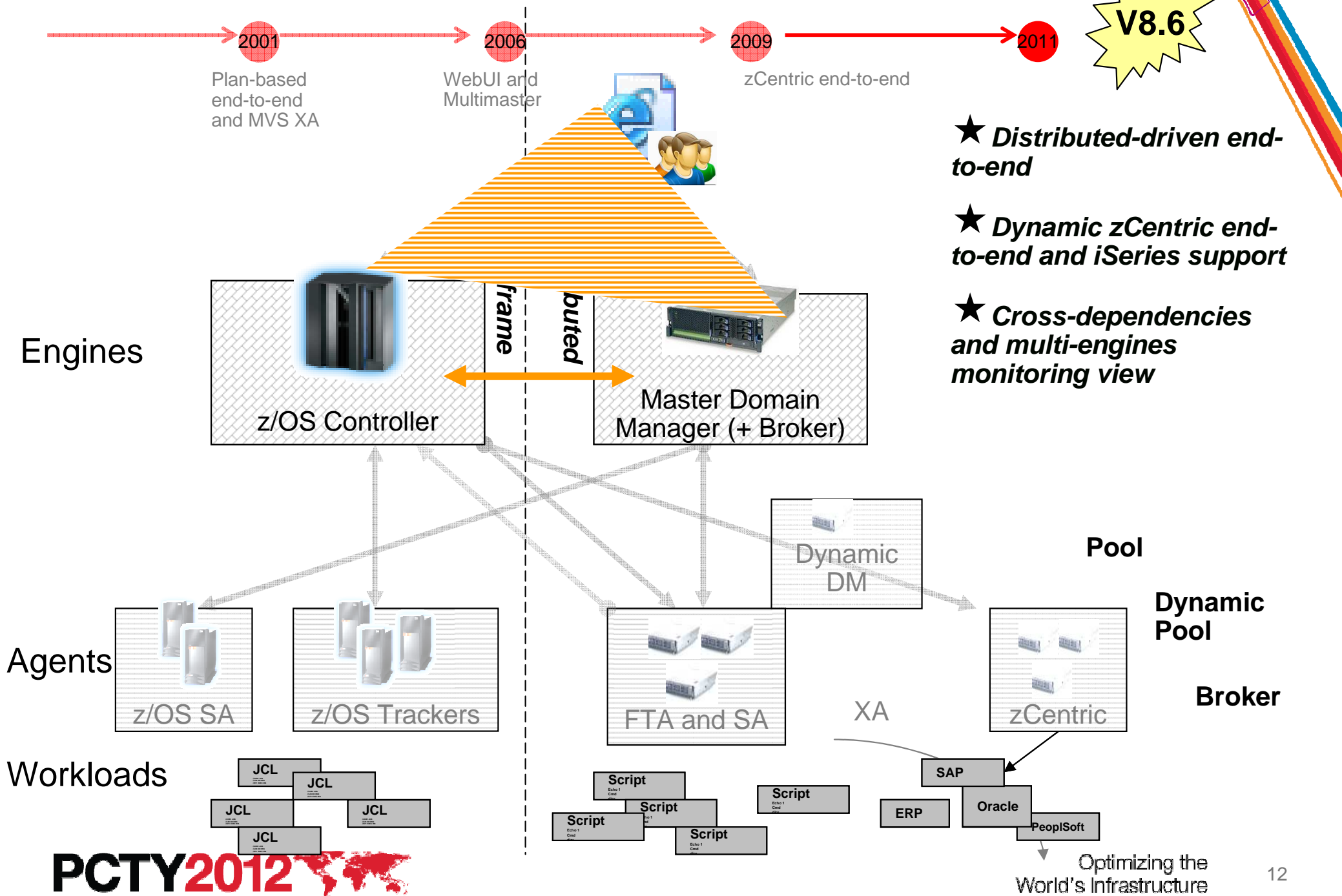
How Version 8.6 contributes to the end-to-end evolution



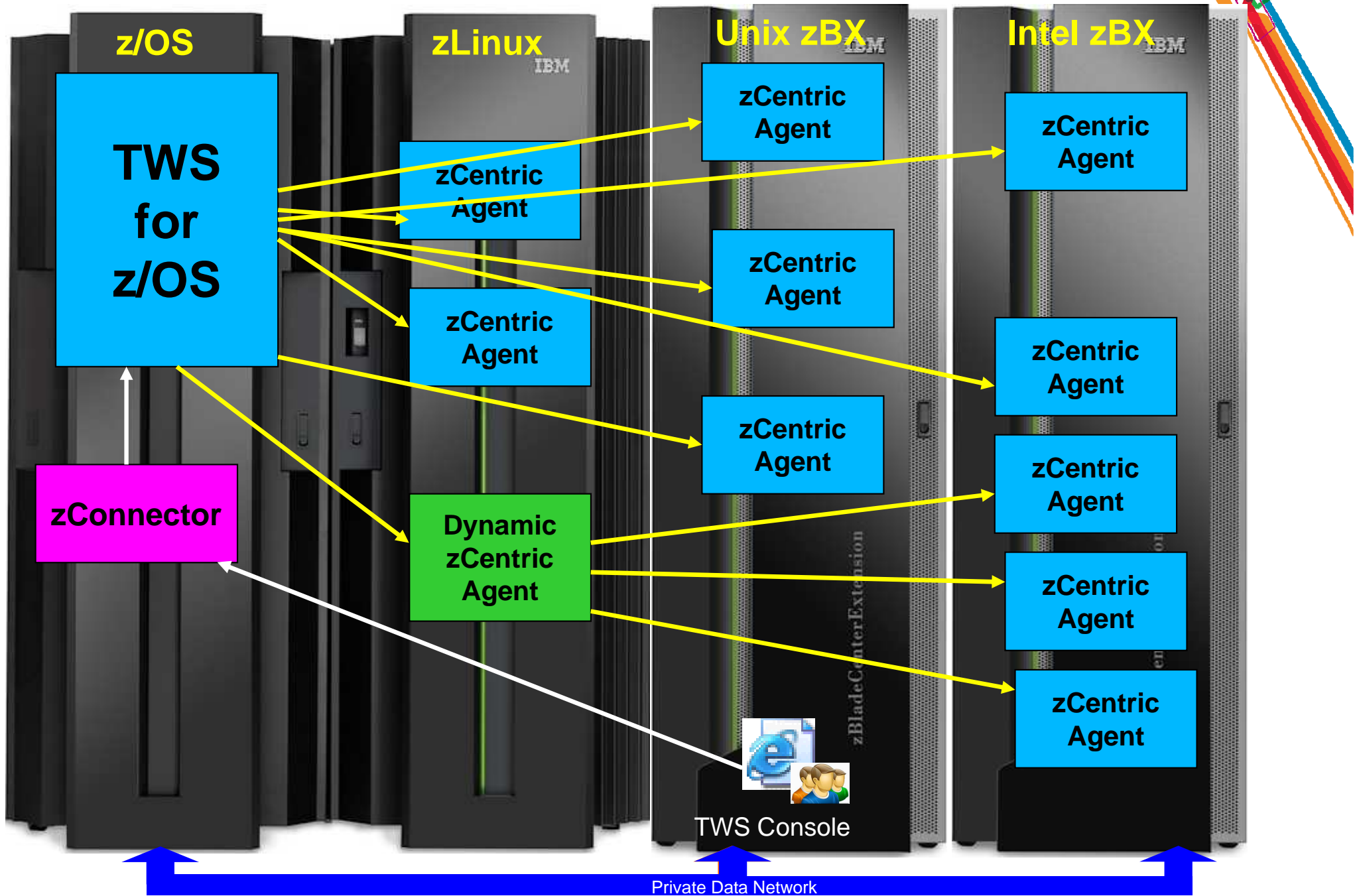
How Version 8.6 contributes to the end-to-end evolution



How Version 8.6 contributes to the end-to-end evolution



Best fit End to End on zEnterprise





Batch Modernization

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How Version 8.6 contributes to the Batch Modernization

Examples of batch modernization

Transform: batch applications using modern languages (ex. COBOL to Java)

Re-use: existing applications with business oriented Web Services

TWA V8.6 helps supporting transformation and re-using projects

- Invoke scheduling services as Java API
 - Through **zConnector, now running also on z/OS**
- Enable wrapping existing scheduling services with **web services**
 - Edit and submit jobstreams with variable substitution
- Embrace scheduling of Java and Web Services

★ *Reduce costs offloading MIPS to zAAP*

★ *Enable easy remote access to scheduling services*

★ *Re-use of existing processes running rather than encouraging a re-write*

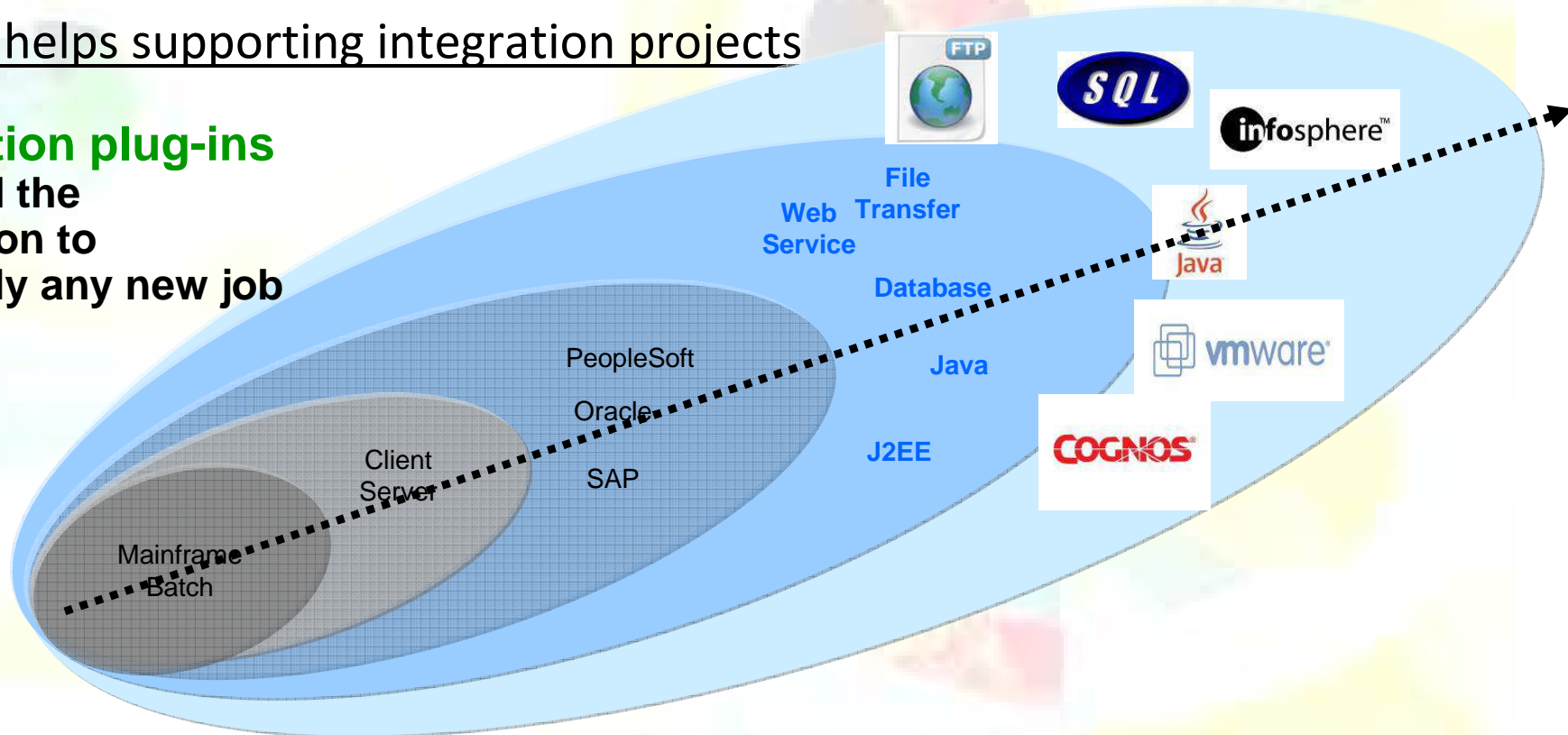
How Version 8.6 contributes to the Batch Modernization

Examples of batch modernization

Integrate: legacy applications with new applications

TWA V8.6 helps supporting integration projects

- **Application plug-ins** to extend the automation to potentially any new job types



Application Plug-ins

What we offer to 3^o parties (Clients, BP, System Integrators) for new Application Plug-ins implementation

- **Tivoli Workload Scheduler Integration Workbench**

- Takes you through the **creation** of your plug-ins

- Two main phases:

- Panels creation (AUIML file)
- Execution method creation (JSDL)

Application Plug-in (jar file)

A screenshot of a web browser configuration window. It has a title bar with a small icon and standard window controls. The main area is divided into sections: 'URI' with a text input field; 'HTTP method' with three radio buttons labeled 'GET', 'POST', and 'PUT', where 'GET' is selected; and 'HTTP request parameters' with two sub-sections: 'Parameters' with a text input field and 'Body' with a larger text area.

- After **deployment** of new Application Plug-in, you will be able to manage the new job type in the same fashion as all other TWA job types creation (JSDL)

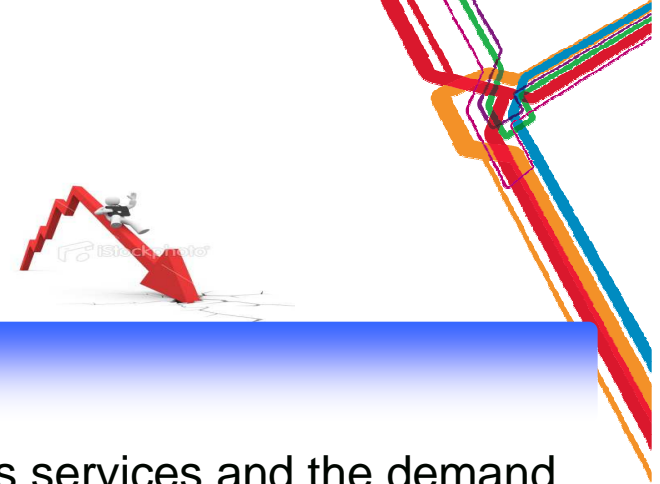


Batch Cloud

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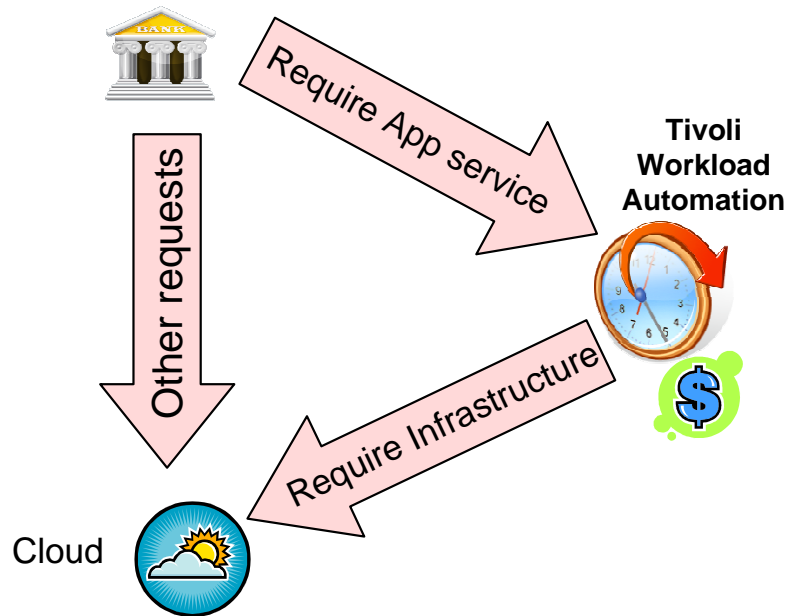
Cloud and workload automation

Cloud accelerates the need for workload automation



Value proposition

- ★ TWS has moved to the center between the request for business services and the demand for Cloud infrastructure and resources: it allows to manage mission-critical, end-to-end workloads through fluid and elastic cloud resources



Capabilities

- **TWS v8.6** provides TSAM integration for
 - Immediate provisioning of workload automation ready environment, for temporary demand
 - Elastic provisioning of workload automation resource for intermittent demand

Business Value

- ★ *Reduce resource, installation and customization costs and increase productivity*
- ★ *Adapt quickly in the context of limited resources*

Cloud workload automation benefits



▪ Elastic scaling

- Automatic provisioning of additional TWS agents in case of delay in processing TWS workflows. Delay triggers TSAM request for new agent provisioning.

▪ Provisioning of a batch-ready environment

- Request through TSAM a batch-ready execution environment. The owner will be able to use that environment and schedule jobs.

▪ WEE failover

- Automatic provisioning of a server capable to satisfy job resource requirements, to recover the a job in error. TSAM is invoked as a recovery action and it provides the needed server.



Usability

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New ISPF panels

Scenarios

- Customers require to rapidly navigate across ISPF TWS Dialogs, to accelerate operations, increase speed-up and more confidence with the product interface.

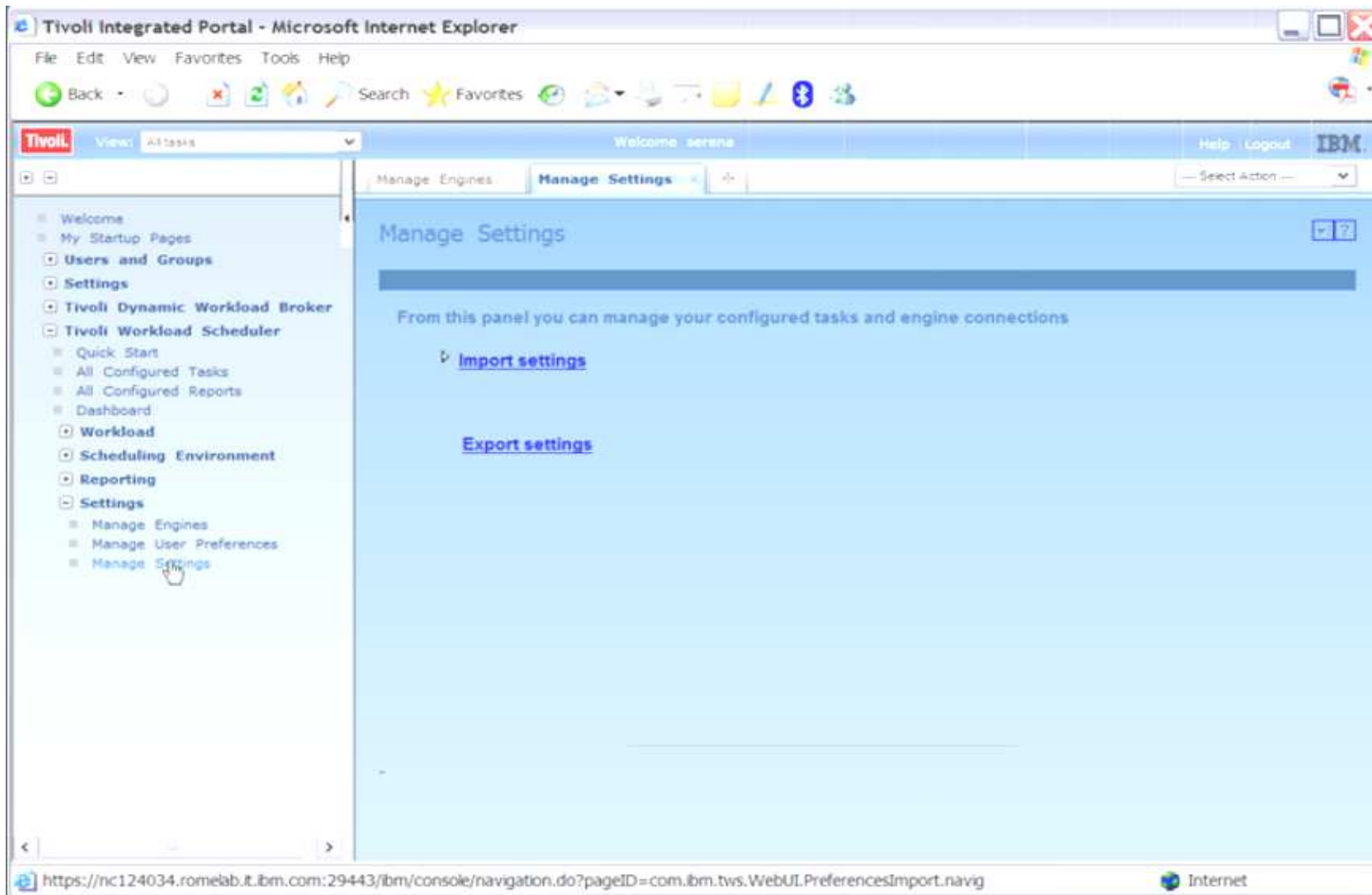
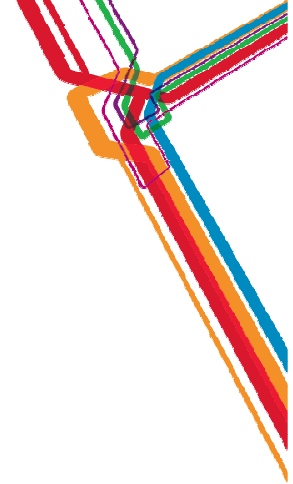
One scrollable view for all Application Description object information

Action bars

```
Session A - [32 x 80]
File Edit View Communication Actions Window Help
Action View Help
EQNALSL LIST OF APPLICATIONS
Command ==> Scroll ==> CSR
View: Classic Row 1 of 5 >>
Row Application text Valid Valid T S
cmd ID From Date To Date
APPL1 test application 1 10/10/18 71/12/31 A P
APRED test application 2 00/10/18 71/12/31 A A
GRU1
GRU2
MYGROUP
*****

Session A - [32 x 80]
File Edit View Communication Actions Window Help
Action View Help
1. Create (CREATE)
2. Print Applications (PRINTA)
3. Mass Update (MASSUP)
APPLICATIONS Scroll ==> CSR
1 of 5 >
Row Application text Valid Valid T S
cmd ID From Date To Date
APPL1 test application 1 10/10/18 71/12/31 A P
APRED test application 2 00/10/18 71/12/31 A A
GRU1 00/10/18 71/12/31 A A
GRU2 00/10/18 71/12/31 A A
MYGROUP test application group 10/10/18 71/12/31 G A
***** end of data *****
```


Tivoli Dynamic Workload Console



- XML support
- Easy to unload definitions (engines, tasks)
- Easy to import unloaded information

Operating on demand

