HP OpenView

Web Services Management

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HP OpenView

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Presentation Scope

- Web Services Management Users
- OpenView commitment to Web Services Management
- Define “Web services”
- OpenView Web services management strategy
- Actively Managing Web services
- Web Service Management Engine
- The Road to Adaptive Management

Web Services Management Users

An operations manager is primarily concerned about element level information. Network, operating system and perhaps some application server layer information is suitable for operations manager. The Web Services Management Engine is leveraging emerging standards to flow management information into OpenView Operations/Service Navigator for views that the Operations Managers cares most about.

Operations Manager

An application manager is less concerned with the big picture of the enterprise, and more concerned with information specific to the application or Web service he/she is responsible for managing – detailed performance analysis, access control, QoS, etc. At the application/service level, there is a need to identify multiple control points and establish channel(s) to inject adaptive management capabilities. The Web Services Management Engine extends OpenView Transaction Analyzer for Web services and offers other value added features for the application manager.

Application Manager

OpenView's commitment to Web Services Management

"Of the established systems/network management vendors, HP has (at the time of writing) the most clearly defined position with respect to managing Web services at the service (as opposed to platform) level."

- IDC, February 2003

"We believe that HP's strategy represents progress in the right direction – a strategy that both endorses HP's overall vision for providing adaptive open infrastructure as well as one that can be delivered as a best of breed solution."

- Ptak & Associates, Inc., May 2003

"We're impressed with HP's approach to Web Services management and to the Web Services market."

"We're impressed with aspects of HP's game plan. It addresses the customer need for help in implementing Web Services, the industry need for Web Services management standards, and offers an ingenious approach to creating management capability that uses and proliferates HP's proposed Web Services management standards."

- Patricia Seybold Group, April 2003

Web Service Defined

Business

A Web Service is a way of accessing or communicating between applications using industry standard protocols.

Technical

A Web service can be simply defined as any application (J2EE, .NET, or legacy) that is wrapped in WSDL and transported via SOAP.

HP OpenView Web Services Management Strategy

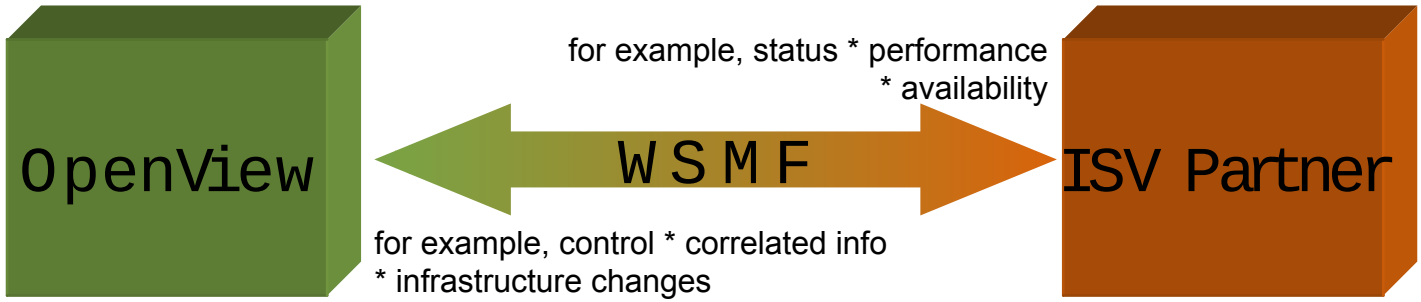
- Management of Web services
  - Web Services Management Engine extends key OpenView products to enable Active Management of Web services
  - Embeddable components with tight integration to Web service platform partners that address both enterprise and tactical management needs
  - Real-time management of Web services themselves, in addition to the Web service platforms they run upon via Smart Plug-ins (SPIs)

- Management through Web services
  - OpenView is advancing a Web services management framework specification for “manageable” Web services that HP will contribute to OASIS
  - “Manageable” Web services enable OpenView to provide greater functionality and to manage resources via Web services
  - This bi-directional, standards-based channel provides foundation for adaptive management
  - Work closely with ISV partners to implement this specification on their platform to adding manageability, and create pull through for OpenView via joint marketing and selling programs

HP OpenView Standards Leadership

- ONE management channel
  - Management data “pipe” that delivers management services
  - Standards-based (web services)
  - Bi-directional
  - Repeatable with other management vendors
  - Keeps up with versioning
- That delivers:
  - Application management - alerts, turning bits on and off centrally, QOS data, etc…
  - Application Impact – impact of compute events on your applications
  - Business Impact –impact of compute events on line-of-business managers (put into business context)

Web Services Management Framework



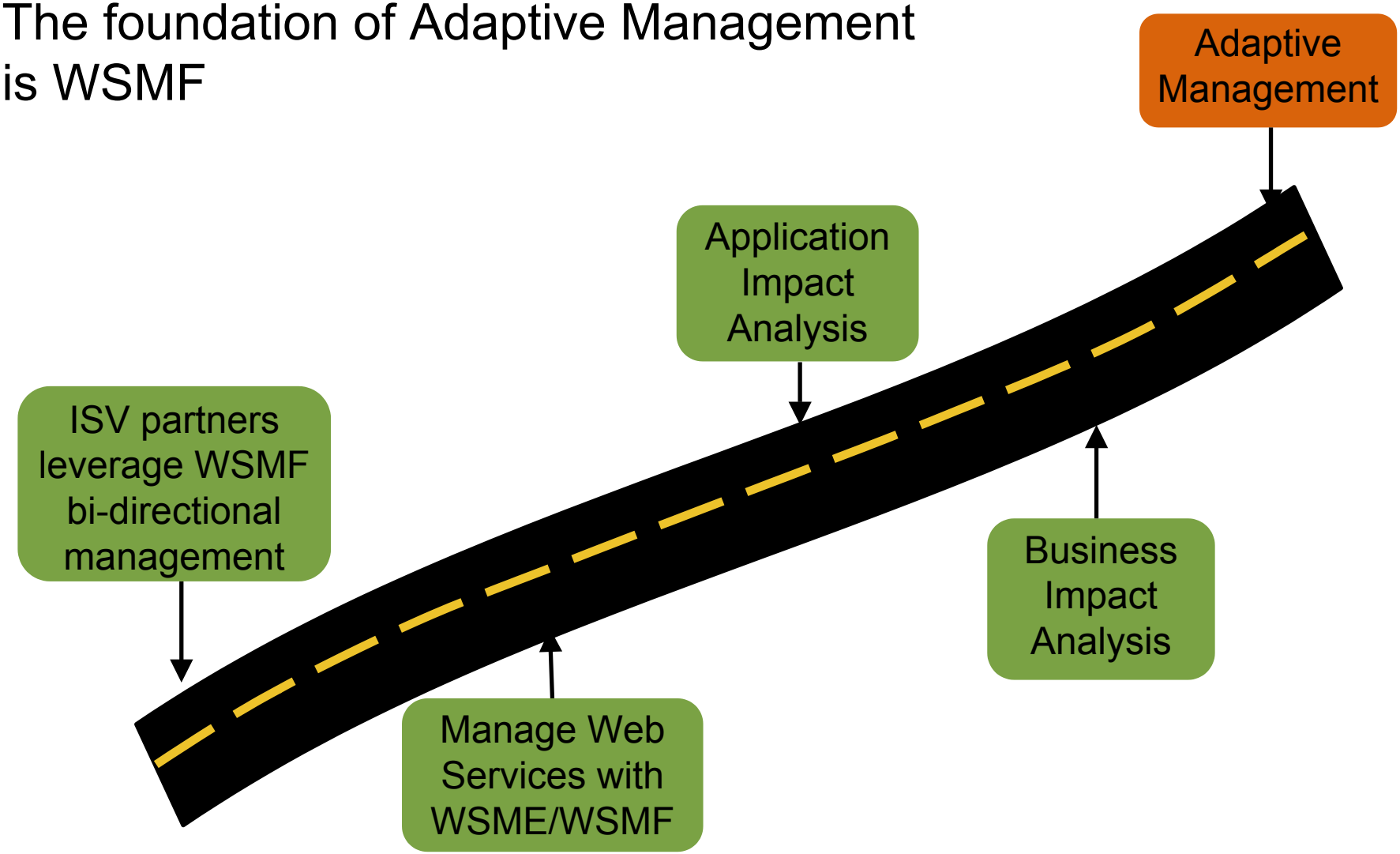
- WSMF is a key foundational element for Adaptive Management and extremely applicable for GRID Management.
- The specification provides a framework for managing IT resources **through** web services. A web service is defined as as any application (J2EE, .NET or legacy) that is wrapped in WSDL and transported via SOAP.
- Open, extensible architecture that can implemented gradually to expose management information.
- Management information shared through an external standard in a bi-directional way
- HP is working with partners to ensure broad applicability in management solutions

Web Services Management Framework

- Version 1.20.10 of technical architecture available
- Invested heavily in direction of OASIS Web services Distributed Management Technical Committee
- Sharing work with partners in a number of domains incl. ERP, App server, platform, EAI, and other key Web service players
- Reference Implementations available
- ISVs currently in active development phase

The Road to Adaptive Management

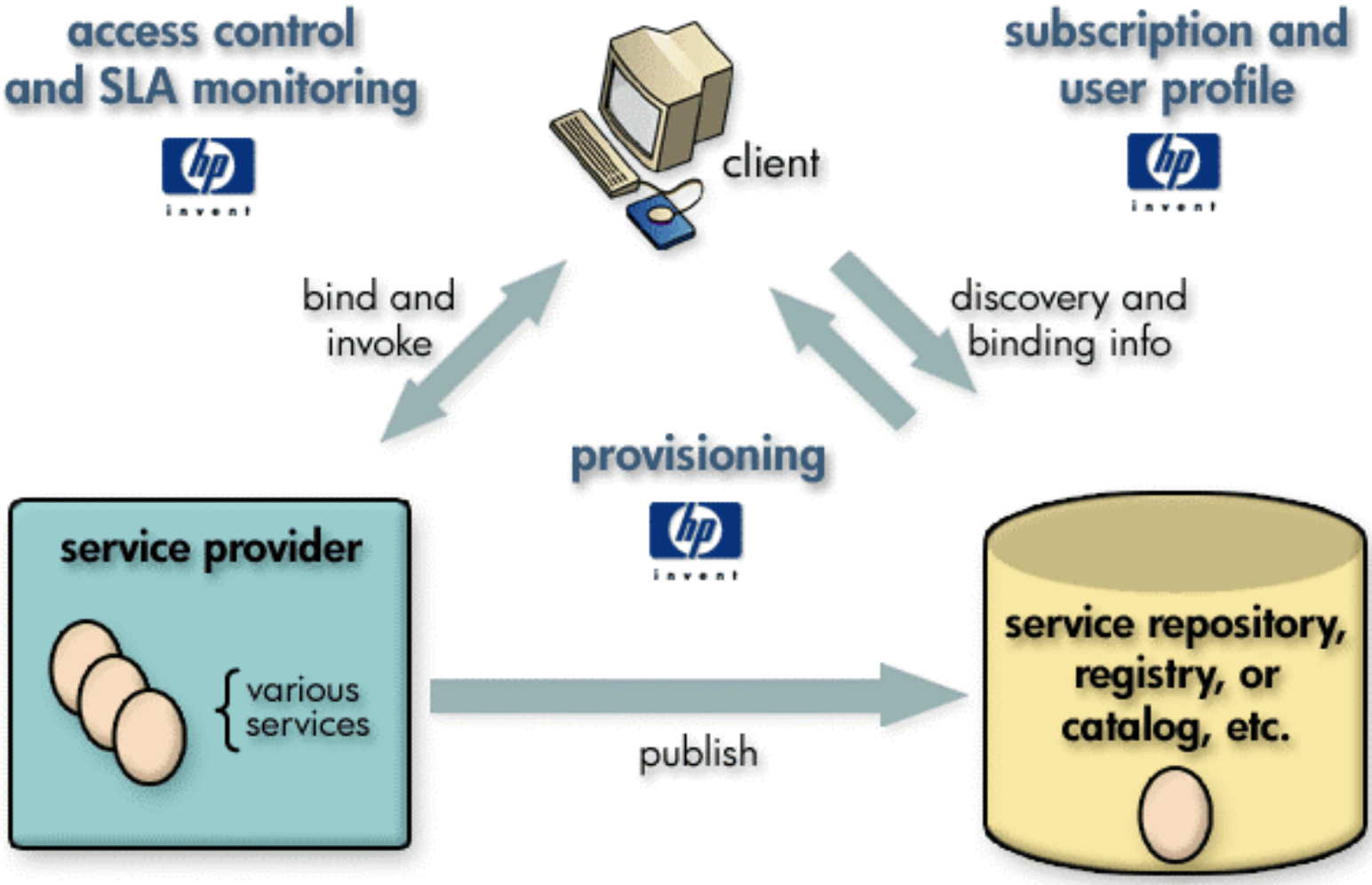
The foundation of Adaptive Management is WSMF



What is Active Management of Web services?

- Web services are a double edge sword – they make integration easier, but do so via less reliable means of transport. As such, Web services fundamentally change the way we look at management.
- Active management is the ability to manage the Web services themselves, as opposed to the platforms upon which they run.
- To truly manage Web services on this level, you must be able to:
  - provision the Web service on a per user or per service basis.
  - enforce those attributes when the Web service is requested
  - identify users, or subscribers, to control access to Web services
  - gather metrics in real-time
  - intercept Web service request or be in the critical path of a managed resource
  - monitor the QoS/SLA in real-time

Active Management Aspects of the Web Service Lifecycle



…and where OpenView adds value

Provision and Subscribe

Provision:

✓Provisioning is simply assigning attributes to a Web service that will apply when a user invokes it, such as Quality of Service, access control, etc.

✓Web services can be provisioned on a per user, or anonymous basis.

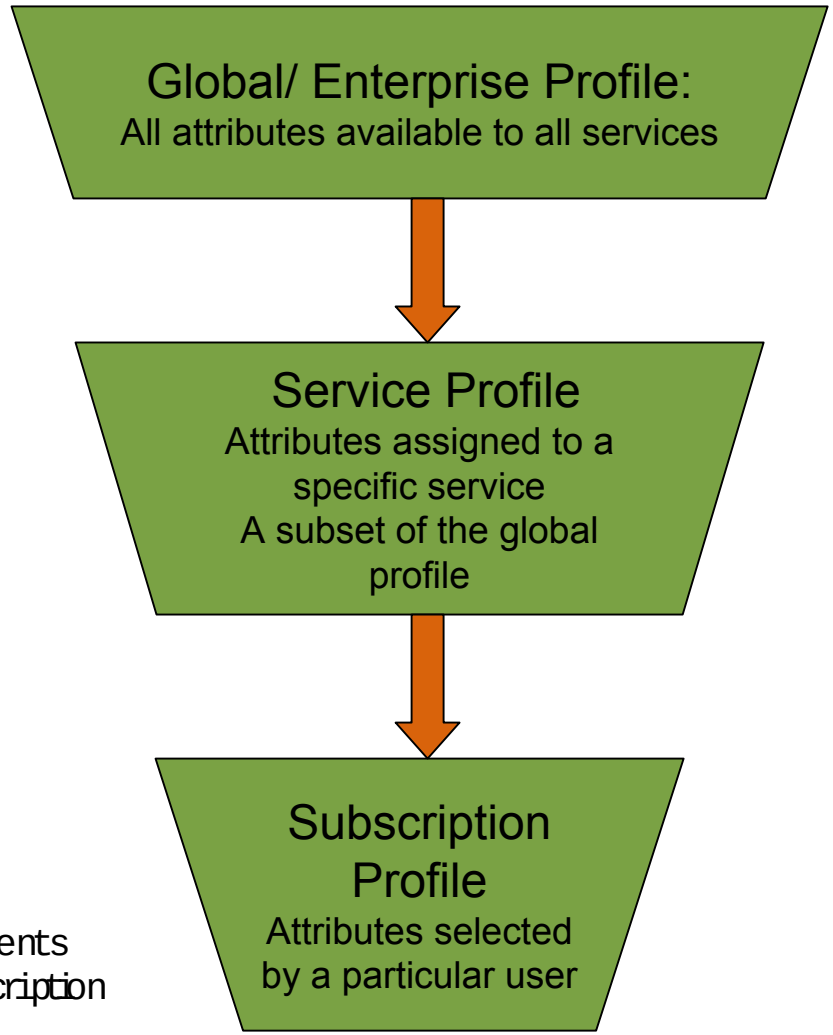
Subscribe:

✓Once provisioned, users access Web services by subscribing to them, and agreeing to a certain level of service, type of access, etc.

✓Subscribers could be:

- named or anonymous;
- external customers, partners, or employees;
- human or other applications.

*In addition to the Web Service Management Engine components that run in the Web service platform, a provisioning and subscription GUI tool is also provided.



Web Services Management Engine: Where does it fit in the OV Portfolio?

- Web Services Management Engine:
  - complimentary technology, extends key OpenView products
  - implements an emerging Web services management standard, plus provides value-added features beyond the specification
  - consists of components that run on Web service platform plus tools for provisioning and subscription
  - may be deploy as a control point or an end point
- Web Services Management Engine extends key OpenView products to manage Web services, including:
  - OpenView Operations/Service Navigator
  - OpenView Transaction Analyzer
  - OpenView Service Desk
- Currently available for Lighthouse Customers

Web Services Management Engine: Value Propositions

- **Solves problem of making Web services practical for cost saving and revenue generation**

- Extends OpenView enterprise class, comprehensive management portfolio to Web services, as well as addresses tactical Web services management needs
- Manages Web services running on .NET, J2EE or legacy platforms
- Enables easy provisioning and management of local or remote Web services running on another platform
- Enables Web services management from enterprise management console via OpenView Operations/Service Navigator
- Enables detailed performance analysis of Web services via OpenView Transaction Analyzer
- Real-time SLA monitoring and notification for Web services via OpenView Service Desk
- Leverages enterprise level security of Web service platform
- Supports and tracks with evolving standards
- Adds value and manageability to the Web service platform

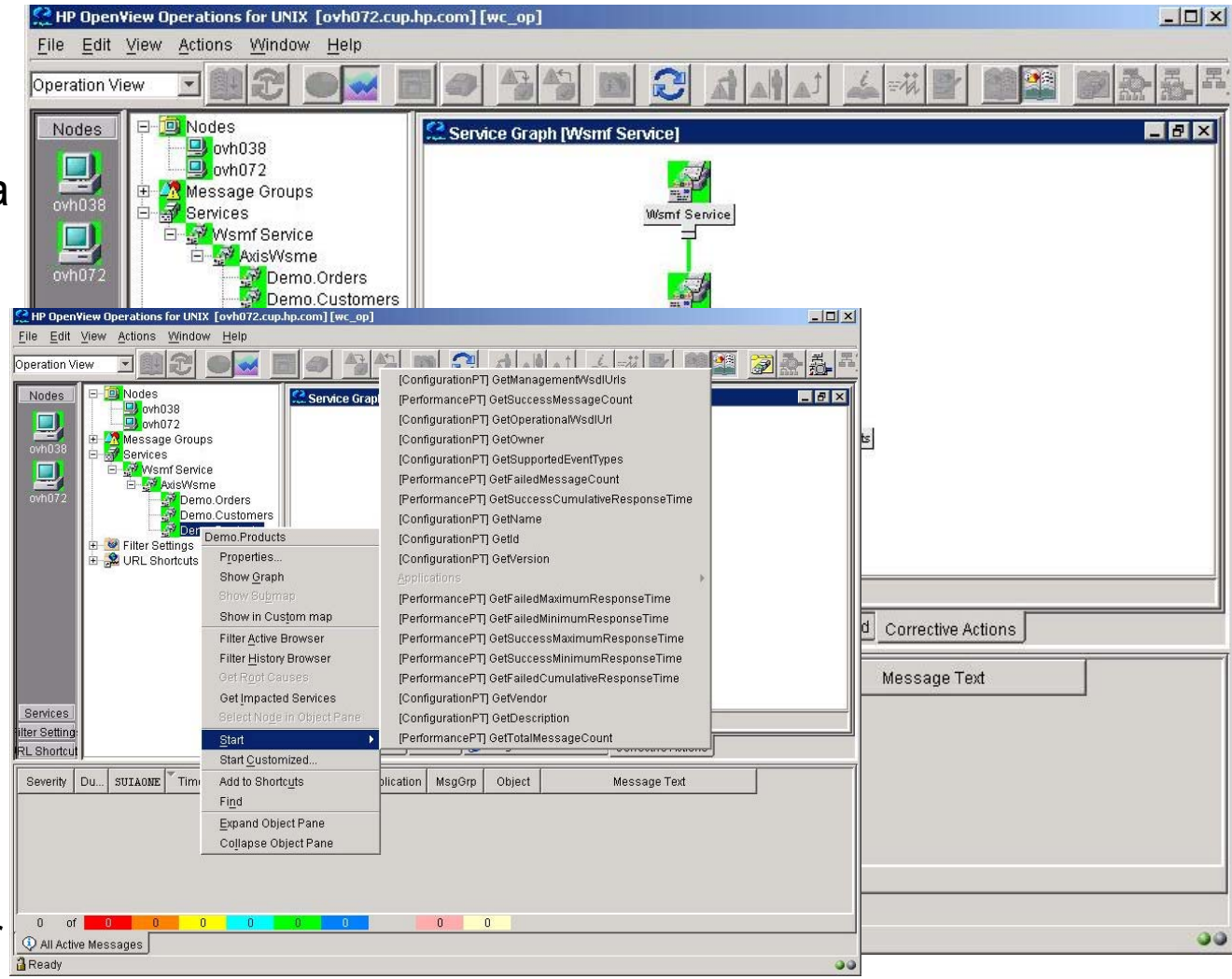
Web Services Management Engine: Functionality

- Provision management attributes to .NET, J2EE and/or legacy Web services on a subscription, or anonymous user basis
- Provision and enforce WSP container implementations of Access control, Authorization and Authentication
- Define and monitor Service Level Agreements (SLA) in real time
- Dynamic routing of Web services
- Extends OpenView:
  - Operations/Service Navigator for enterprise level Web services management
  - Transaction Analyzer for detailed performance analysis of Web services and underlying components
  - Service Desk by generating help tickets for Web service SLA violations
- Additional functionality planned based on Lighthouse Customer feedback

Extended into Web Services Realm: ov Operations/Service Navigator

With WSME technology, Operations/Service Navigator can:

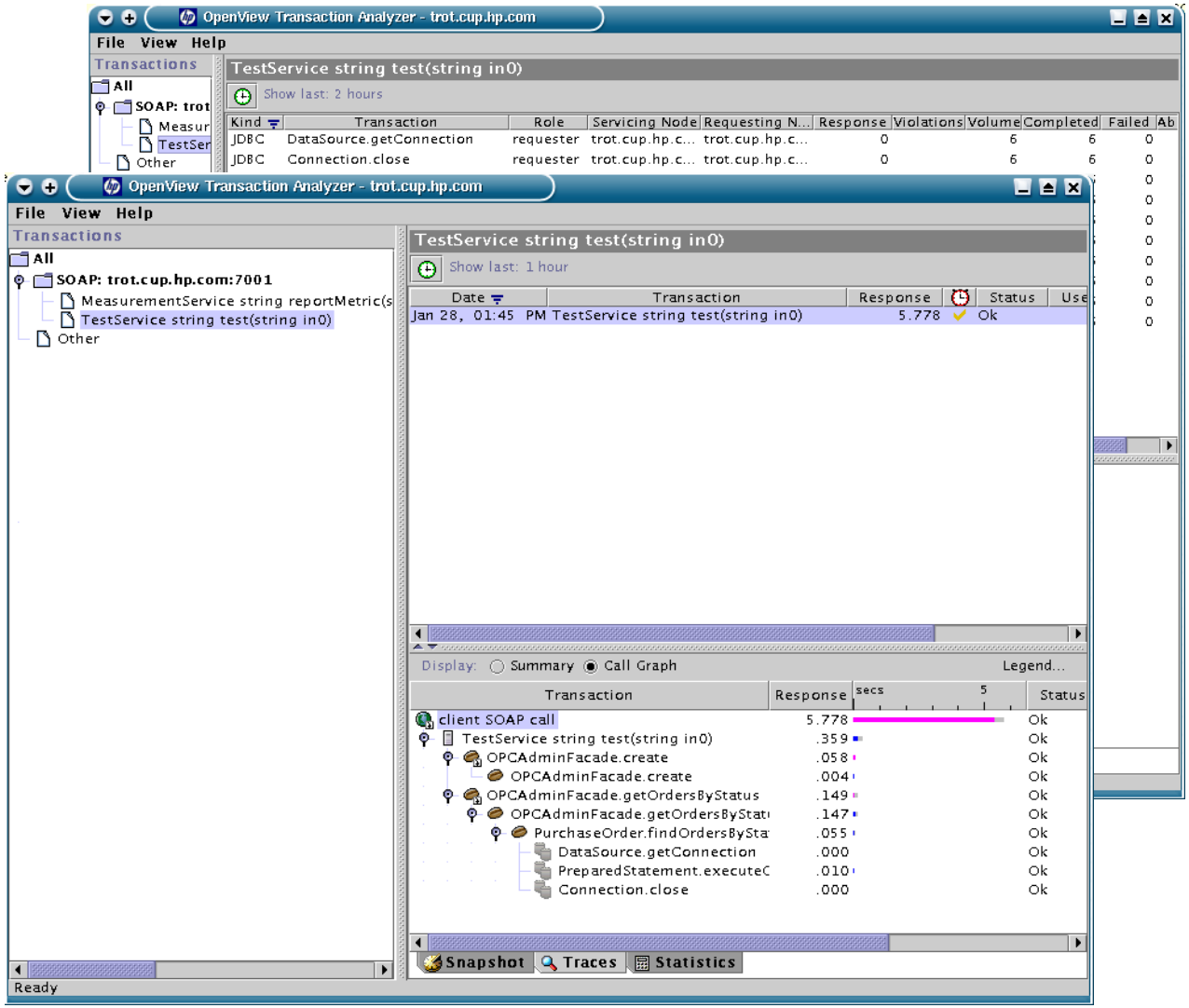
- Graphically represent a Web service
- Monitor the health and instrumented data for Web services on a Message, User, and Node group levels.
- Enable start/stop and access several basic manageability metrics for Web service.
- Web services provisioned with WSME are automatically discovered and appear in the Service Navigator tree.



Extended into Web Services Realm: OpenView Transaction Analyzer

With WSME technology, OVTA can:

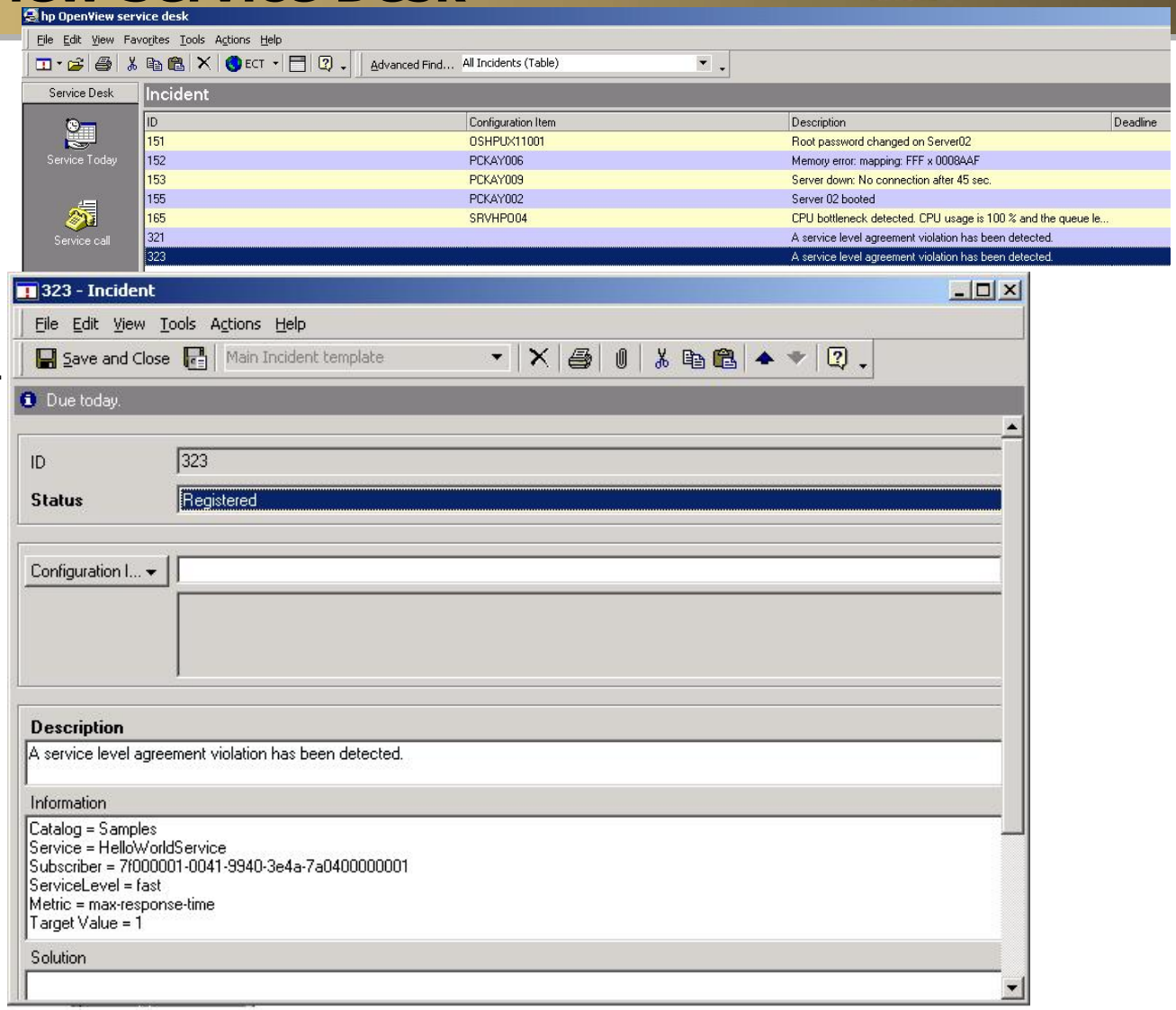
- Monitor service levels of real end user SOAP transactions
- Direct attention to specific problem areas in the SOAP processing path for fast problem isolation
- Perform Web service transaction drill down and base lining



Extended into Web Services Realm: OpenView Service Desk

With WSME technology, Service Desk can:

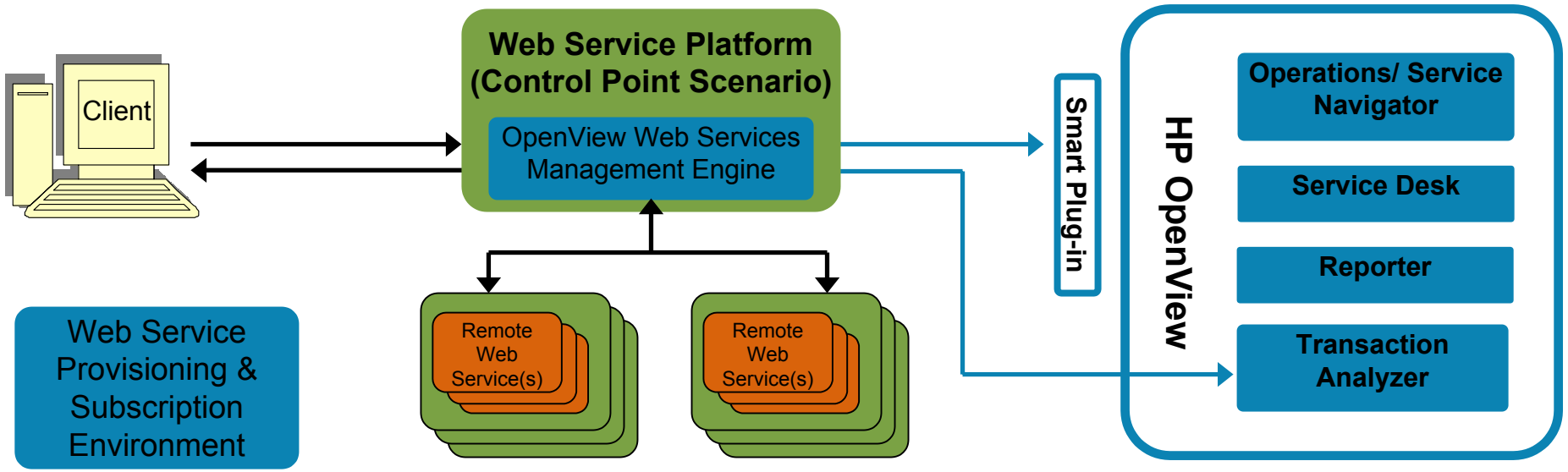
- Receive help tickets for Web service SLA violations in real time.
- Identify user-specific Web service SLA violations.



Web Services Management Architecture: Control Point Scenario

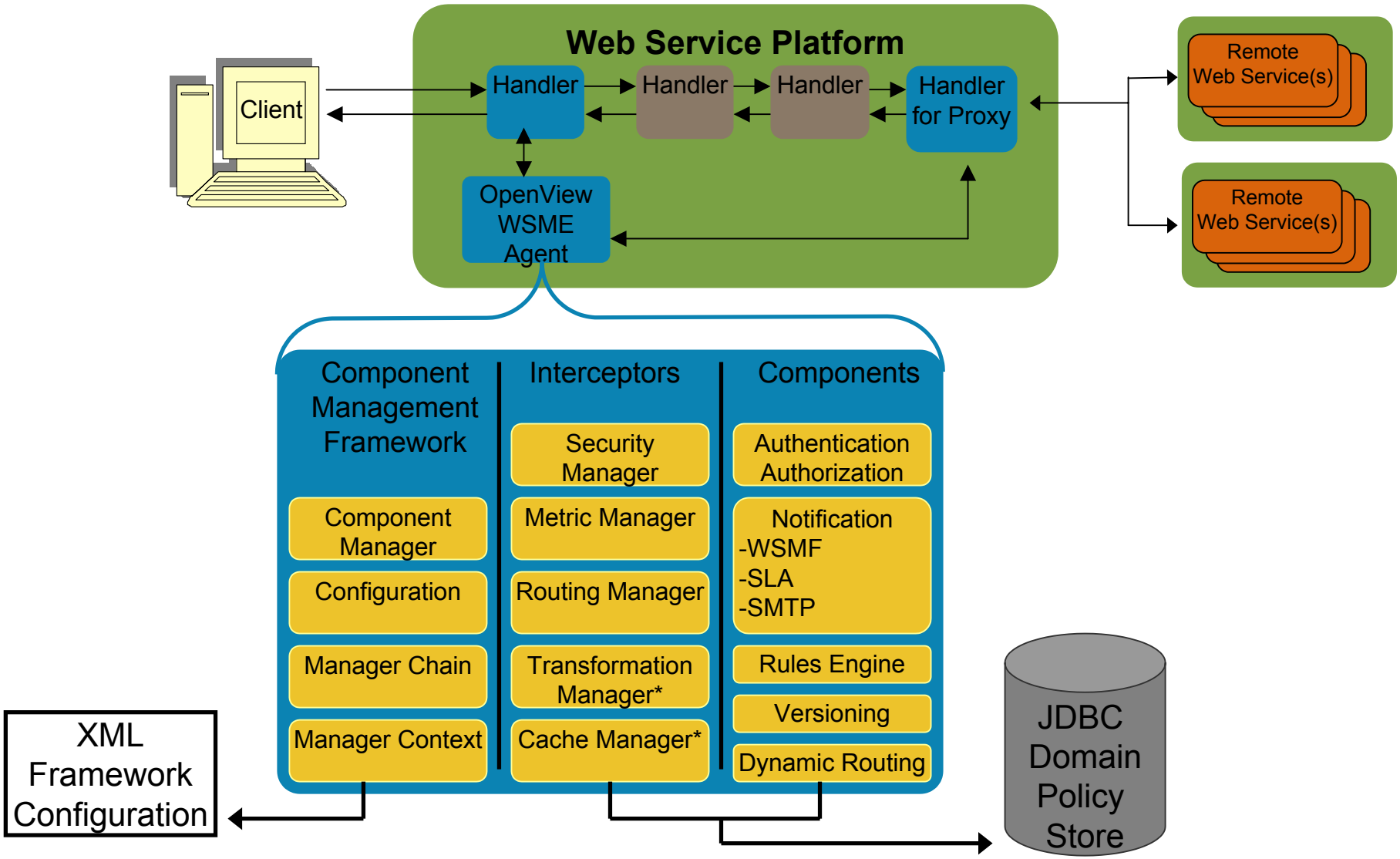
2. Client invokes a Web service running remotely, deployed on a different platform than the Web Services Management Engine. The Web Services Management Engine acts as a control point in front of any number of Web service platforms and enforces access control, monitors Quality of Service & collects several management metrics. This is done seamlessly to the Client.

3. Management information flows though a bi-directional, standards-based channel to Operations/Service Navigator and other key products in the OpenView portfolio. Transaction Analyzer integration is via ARM.



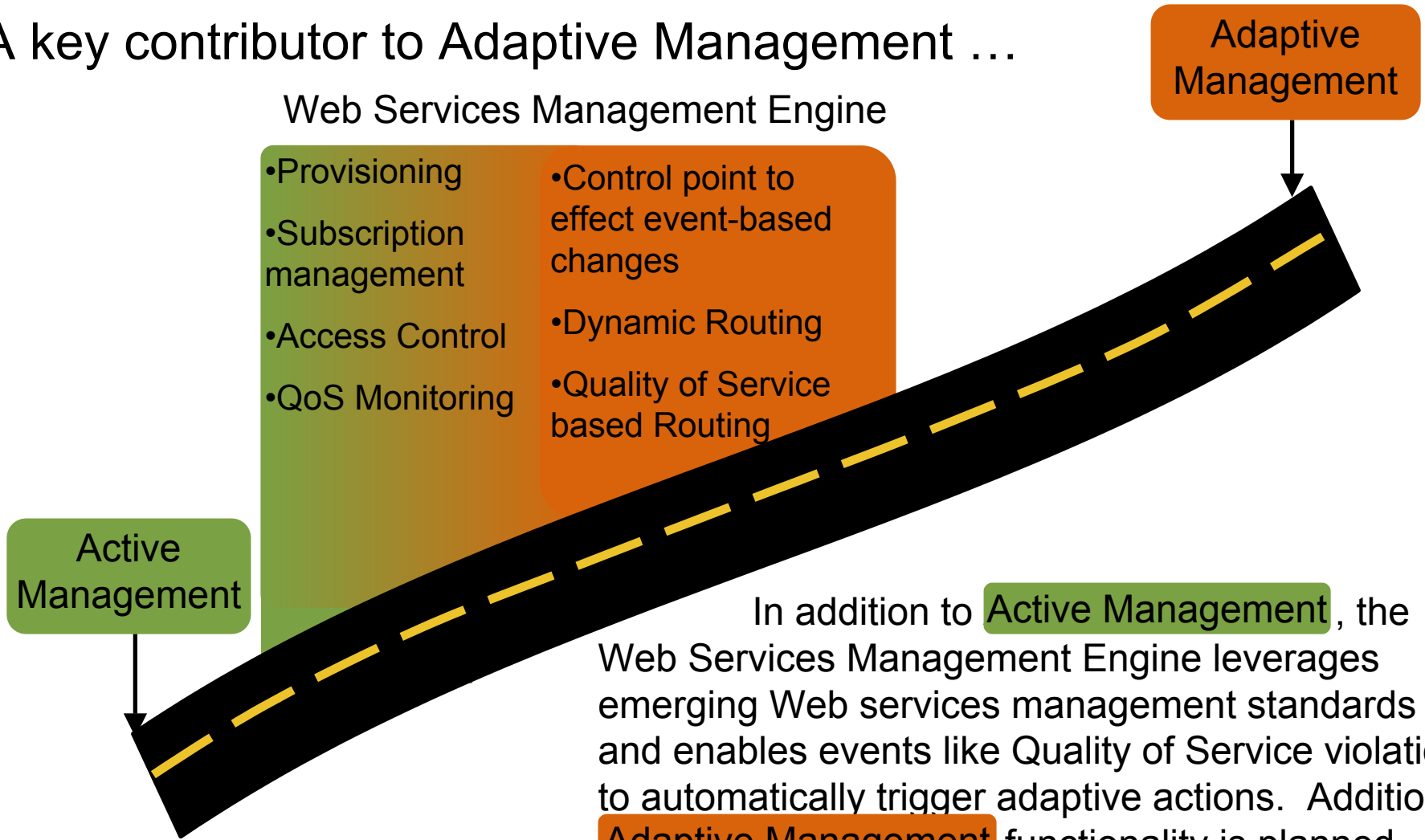
1. Web services are first provisioned with attributes like QoS, access control, etc. Clients can subscribe, or be subscribed to services on a specific or anonymous basis.

Web Services Management Architecture: Detailed View



The Road to Adaptive Management:

A key contributor to Adaptive Management …



In addition to Active Management, the Web Services Management Engine leverages emerging Web services management standards and enables events like Quality of Service violations to automatically trigger adaptive actions. Additional Adaptive Management functionality is planned.

Web Services Management Lighthouse Program

- **What is it?**
  - The Lighthouse Customers Program gives participating customers the ability work closely with the OpenView Web Services Management team to identify requirements, refine standards and evaluate Web services management software.

- **Why should I participate?**
  - Access to HP Web services and management expertise
  - Early access to cutting edge technology
  - Opportunity to influence product development
  - Support will be provided by the engineers who built the software

- **How can I get more info?**
  - Contact Jon Atkins at jon.atkins@hp.com or 856.638.6241

Key Takeaways

- OpenView is **committed to Web services management**, is driving standards, and has announced technology in the Web services management space that extends key products in the comprehensive OpenView portfolio to manage Web services.
- OpenView Web services management **strategy** focuses on the active management **of** Web services, in addition to Web service platforms upon which they run; and management of resources **through** Web services.
- The **Web Services Management Engine** (WSME) is complimentary technology that makes Web services practical for cost reduction/revenue generation. WSME technology resides on the Web service platform and fulfills both the enterprise needs of the Operation Manager and the tactical needs of the Application Manager by leveraging your current technology investments and enabling key OpenView products to manage Web services.
- Web Service Management Engine is available for **Lighthouse Customers**.
- The Web Service Management Engine is an important foundational element for **Adaptive Management**.

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