

The Oracle BPEL Process Manager

BPEL Security Feature Over/Pre-view

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BPEL Security

- Outbound Security (invoking secure services)
 - Authentication
 - Encryption
- Inbound Security (securing BPEL processes)
 - Authentication
 - Encryption
- Other issues
 - BPEL Console security
- Q&A

Outbound Security – Invoking Services Securely

- Authentication
 - HTTP basic auth
 - WS-Security
- Encryption
 - HTTPS
 - WS-Security

Outbound Security: Authentication

- HTTP basic auth services
 - Set http username / password in bpel.xml deployment descriptor (can be encrypted)
 - partnerLink properties “httpUsername” and “httpPassword”
- WS-Security authentication
 - Can be done today but token must come from a service and be manually passed to service (see HotelShopFlow example)
 - Security extension with 10.1.2 phase 2 can automatically propagate credentials
 - 10.1.2 phase 2 has new deployment descriptor properties wsseHeaders, wsseUsername, wssePassword

WS-Security Authentication Demo: HotelShopFlow

Outbound Security: Encryption

- HTTPS
 - Supported today for calling https secured services, *except* for https secured WSDLs
 - Workaround for https WSDLs is to copy them locally
 - See sample: orabpe\samples\demos\SalesforceFlow
 - This problem will be resolved in 10.1.2 phase 2
- WS-Security encryption
 - Accomplished via Oracle Web Services Manager (OWSM – aka “Obliv”) today
 - Supports full and partial encryption
 - Gateway currently available, agent coming

WS-Security Encryption Demo: OWSM + BPEL

Inbound Security – Securing BPEL Processes

- Authentication
 - HTTP basic auth
 - WS-Security
 - Java API / RMI
 - BPEL Security “Extension”
- Encryption
 - HTTPS
 - WS-Security

Inbound Security: Authentication

- HTTP basic auth
 - Can be set-up at the app-server level
 - Can be figured to have different credentials for each BPEL process based on URL
 - Also can be done via BPEL Security Extension
 - Allows single, multi-modal security model
- WS-Security
 - BPEL Security extension
 - Oracle Web Services Manager

Inbound Security: Authentication

- Java API / RMI
 - BPEL processes are accessible via SOAP and Java API (RMI)
 - Web Services / http based security doesn't apply to Java API
 - Use BPEL Security Extension to authenticate for Java API

BPEL Security Extension Overview

Inbound Security Demo: BPEL Security Extension (http, rmi, soap...)

Inbound Security: Encryption

- HTTPS
 - Can be done today via app-server level configuration, with the following caveats:
 - Either internal services (e.g. TaskManager) will be called via http
 - Or you need to get https TaskManager service workaround from us
- WS-Security encryption
 - Accomplished via Oracle Web Services Manager (OWSM – aka “Oblix”) today
 - Supports full and partial encryption
 - See previous demo...

Inbound Security Demo: HTTP Basic Auth HTTPS Inbound

BPEL Console Security

- Today very coarse grained – you can get in and do everything or you can't get in at all
- Domain level security
- Custom authentication model - not plugged in to LDAP, OID, etc
- Workarounds for now are to build own dashboards using our APIs or live with restrictions
- Future plans (10.1.3 or 11 release)
 - Finer-grained control (read vs modify)
 - Tie in to SSO, LDAP, etc
- Please let us know what you want/need since we are working on this now!

Q&A