AON Lab Experience
Introduction

LABAPP-1002

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HOUSEKEEPING

- We value your feedback, don't forget to complete your online session evaluations after each session and complete the Overall Conference Evaluation which will be available online from Friday.

- Visit the World of Solutions on Level -01!

- Please remember this is a 'No Smoking' venue!

- Please switch off your mobile phones!

- Please remember to wear your badge at all times including the Party!

- Do you have a question? Feel free to ask them during the Q&A section or write your question on the Question form given to you and hand it to the Room Monitor when you see them holding up the Q&A sign.
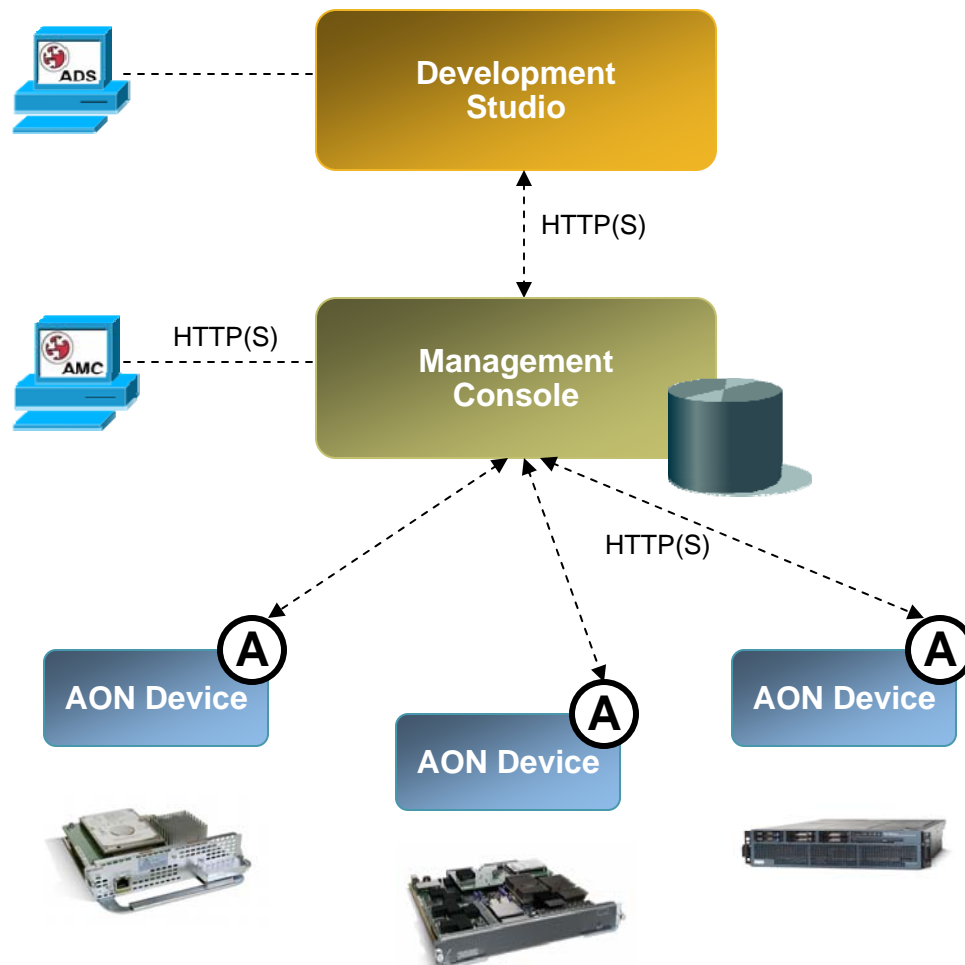
AON
What is it?

Introduction to the Technology, Terms and Tools

100,000 ft view of AON

Network device that *understands* applications

- **Translates: One application '*language*' to another**

- **Monitors: Application '*conversations*'**

- **Enforces: How/when applications '*talk*'**

AON Overview

Development Studio

HTTP(S)

HTTP(S)

Management Console

HTTP(S)

(A) **AON Device**

(A) **AON Device**

(A) **AON Device**

Graphical Development

Drag-and-Drop tooling for definition of AON policy and integration rules

Manageability

Through Management Console and Management Agents, clustered monitoring and management of AON devices and policies

Flexible Form Factors

Available as Network Module for Branch, Catalyst 6500 for DataCentre and Appliance for Stand Alone Operation
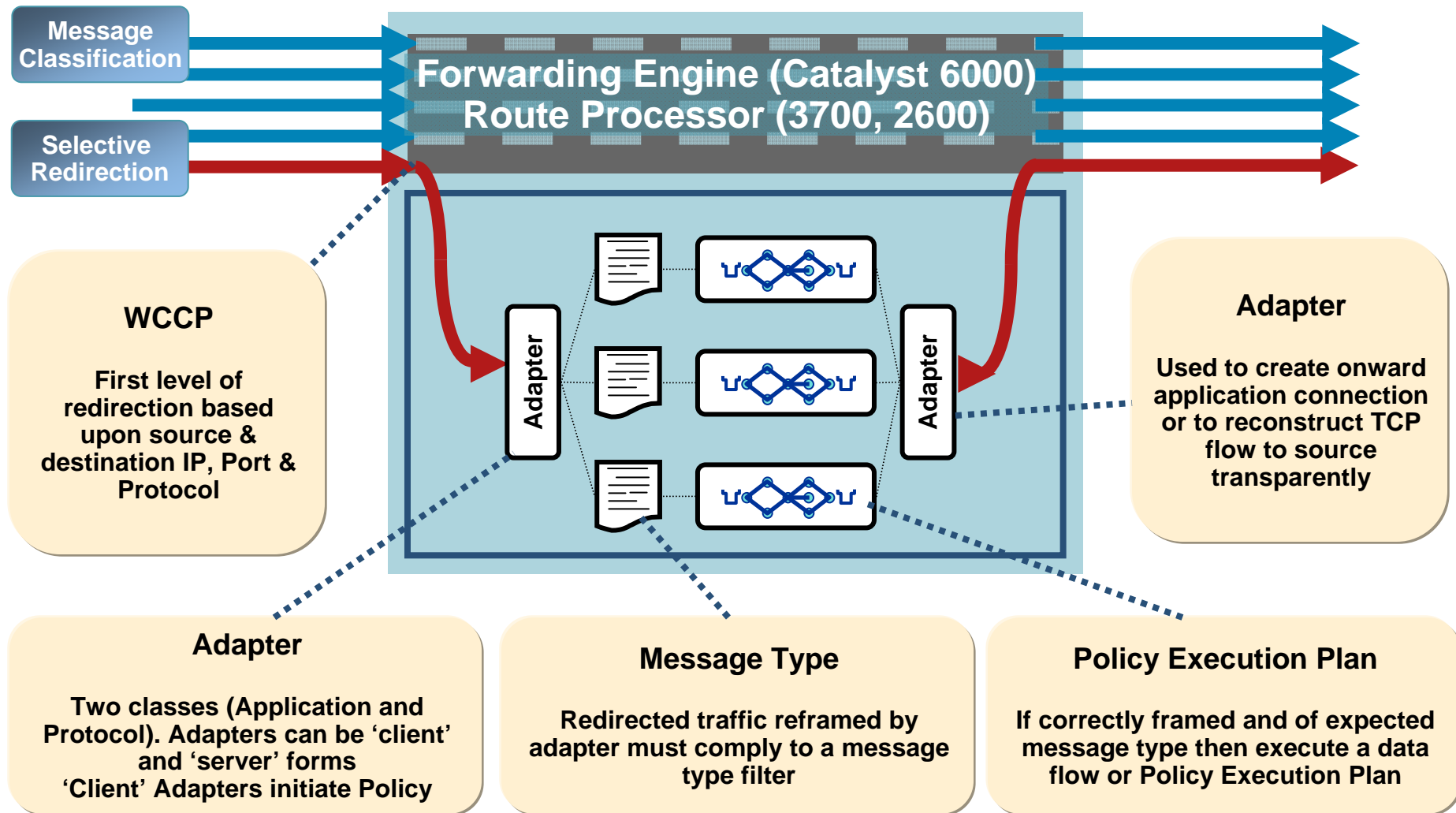
AON Device

Message Classification

Selective Redirection

Forwarding Engine (Catalyst 6000)
Route Processor (3700, 2600)

Log — Encrypt — SetProtocol

Other Blade:
AON, IDS, Firewall, Content, etc.

Cisco AON SM

Cisco AON NM

AON Operates *within* the Network

AON devices receive traffic based upon WCCP redirection properties

AON Device

Message Classification

Selective Redirection

Forwarding Engine (Catalyst 6000) Route Processor (3700, 2600)

Adapter

Adapter

WCCP

First level of redirection based upon source & destination IP, Port & Protocol

Adapter

Used to create onward application connection or to reconstruct TCP flow to source transparently

Adapter

Two classes (Application and Protocol). Adapters can be 'client' and 'server' forms 'Client' Adapters initiate Policy

Message Type

Redirected traffic reframed by adapter must comply to a message type filter

Policy Execution Plan

If correctly framed and of expected message type then execute a data flow or Policy Execution Plan

AON Operating Modes

Explicit Mode

- AON acts as a proxy, explicitly addressed by caller

Transparent Mode

- AON acts as a transparent proxy, invisible to the caller

Promiscuous Mode

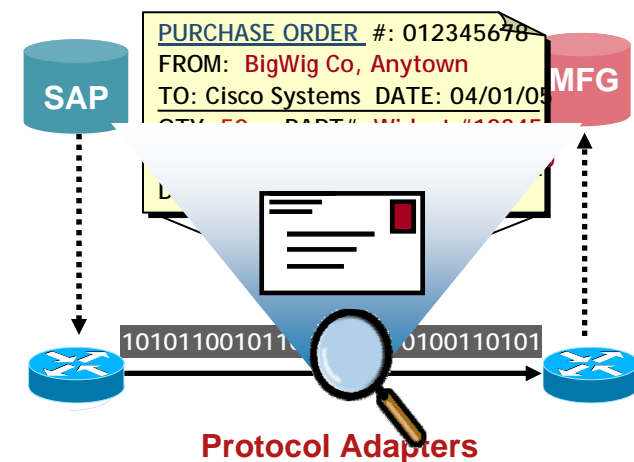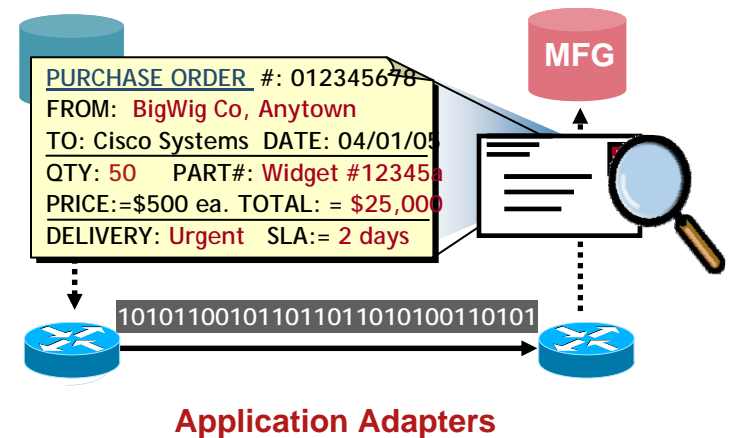- AON receives copies of application messages with *zero* impact on network flow

From: App A
To: AON X

From: AON X
To: App B

App A

App B

AON 'X'

From: App A
To: App B

App A

App B

AON 'X'

App A

App B

All Messages between App A & App B

AON 'X'
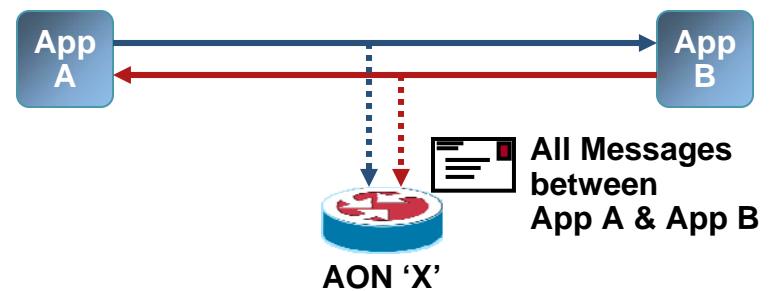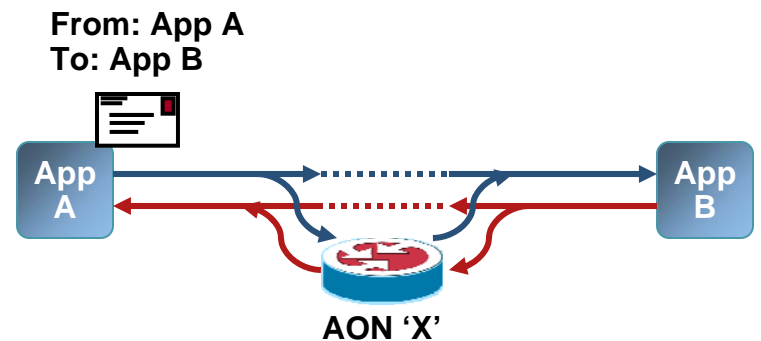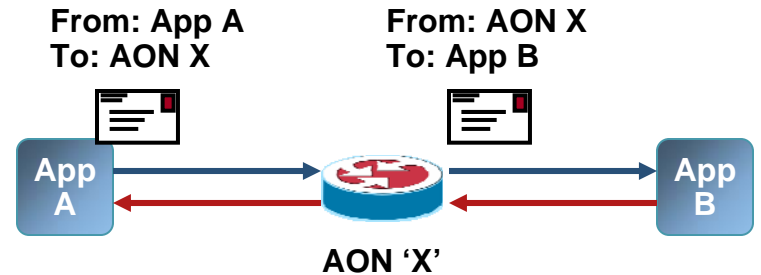
AON Adapters

Traditional Application Adapters

- Operate at Application Level

  e.g. MQ Native Adapter, SAP Adapter

Network Protocol Adapters

- Operate at 'Network' Level

  e.g. 'reframing' application messages e.g. Web Services, JMS etc..

PURCHASE ORDER #: 012345678
FROM: BigWig Co, Anytown
TO: Cisco Systems DATE: 04/01/05
QTY: 50   PART#: Widget #12345a
PRICE:=$500 ea. TOTAL: = $25,000
DELIVERY: Urgent   SLA:= 2 days

MFG

1010110010110110110101001 10101

Application Adapters

PURCHASE ORDER #: 012345678
FROM: BigWig Co, Anytown
TO: Cisco Systems DATE: 04/01/05

SAP

MFG

1010110010111...0100110101

Protocol Adapters

AON Management Tools

AON Development Studio (ADS)

AON Management Console (AMC)
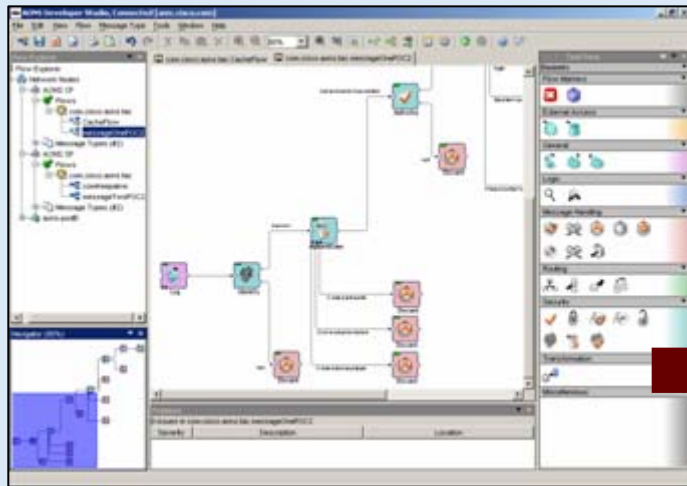
Set Application Communication and Security Policies Via GUI

Manage AON Devices, Distribute Application Policies to All Nodes

AON Data Center Blades

AON Branch Office Blades

User = Applications Manager

User = Network Manager

AON Development Studio

Menu and Toolbar

PEP Developer

Bladelet Repository

PEP Explorer

Navigator

Problems Panel

Key Terms

- Policy Execution Plan (PEP)

    Set of rules to apply to a message

- Bladelet

    Functional unit of a Policy

- Message Type

    Meta filter to determine messages valid for processing
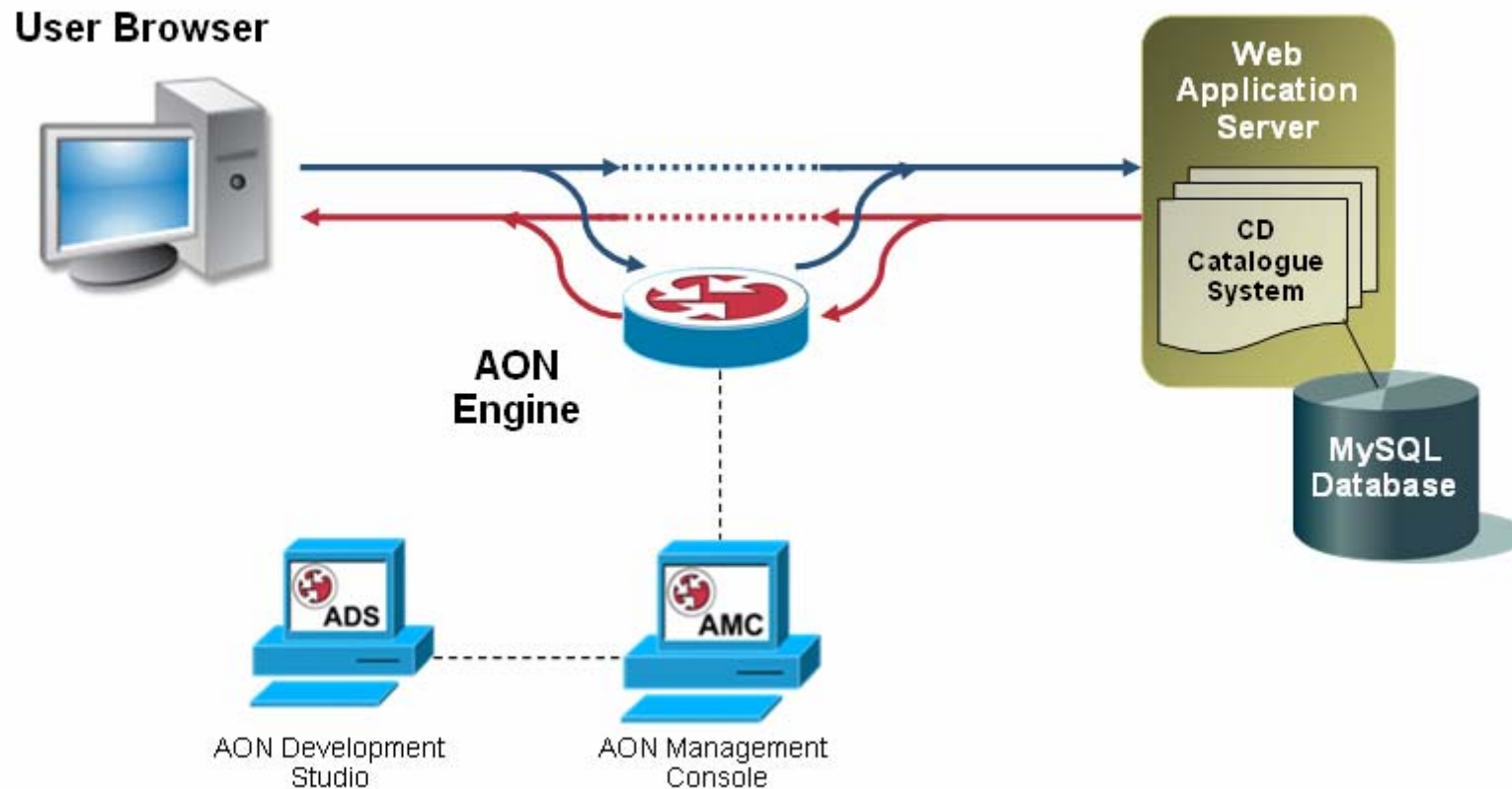
Q and A

The Lab
What we are going to do

Background and Basic Instructions

The Scenario

We will intercept an HTTP post to the application server and change the data to be stored in the database

Basic Steps

- Read the Lab Guide!

- Explore an existing system

- Deploy a new policy

- Update message types

- View the results

Recommended Reading

LABAPP -1002

- Continue your Networkers learning experience with further reading from Cisco Press.

- Visit the on-site Cisco company store, where the full range of Cisco Press books is available for you to browse.

CISCO SYSTEMS

Cisco Storage Networking Architectures Poster

Cisco Press

Q and A