



Monash/AARNet Experience in Cisco IME Trial

Presented by:

Royce Gonsalves

Development Manager, Monash University

Leon Li

Systems Engineer, AARNet

Information Technology Services

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Agenda

- Overview
- IME Components
- Trial topology
- Demonstration
- Results
- Future

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IME Pilot in partnership with Cisco

IME pilot partners

- Cisco
- Monash
- AARNet
- CSIRO
- Swinburne University

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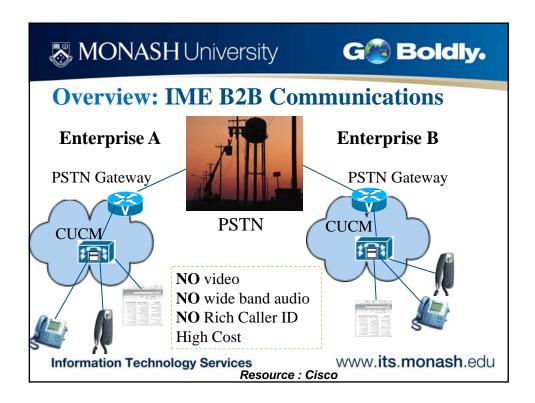
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Intercompany Media Engine

- Provides the infrastructure for establishing voice/video connectivity between enterprises by combining peer-topeer technologies with the existing PSTN infrastructure.
- Enterprises that have deployed Cisco Unified Communications Manager (CUCM) can communicate voice and video via the Internet rather than the PSTN by establishing SIP trunks between them.
- Allows rich media calls with full caller ID caller's full name, wide band audio and video to be delivered in a secure and QoS guaranteed way.

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Overview: IME Solution

- Includes several components to enable:
 - Dynamic learning of IME routes
 - Secure encryption of call signalling and media between organisations.
- Two of these components are hosted on the internet:
 - Godaddy.com enrolment servers hosted by Godaddy.com
 - ❖ IME Bootstrap servers hosted by Cisco
- Components deployed on premises:
 - ❖ IME server, Unified Communications Manager 8.0 & Cisco Adaptive Security Appliance (ASA)

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IME components

Cisco IME server

- Publishes company's directory numbers to the IME ring
- Validates call records
- Learns routes to remote enterprises
- Sends validated routes to CUCM

Cisco Unified Communications Manager 8.x

- Uploads IME designated directory numbers to IME server
- Sends call records to IME for calls made by these numbers
- Receives IME learned routes validated by IME Server Information Technology Services
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IME Components (Cont'd)

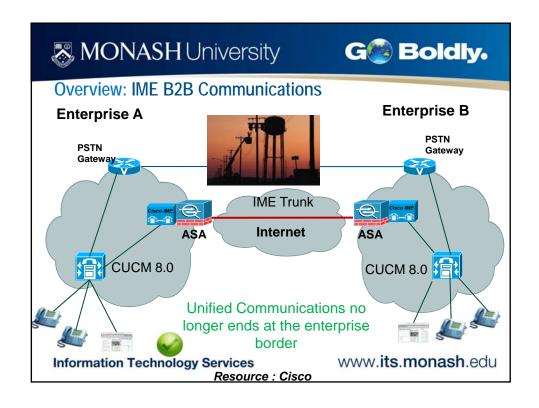
Cisco ASA 5500 series

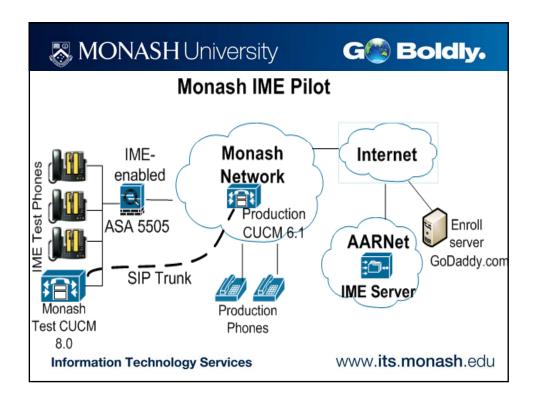
- All IME calls flow through the ASA
- Converts SIP to SIP + TLS for secure signalling
- Converts RTP to Secure sRTP for audio and video media
- Blocks unauthorised calls by ticket validation

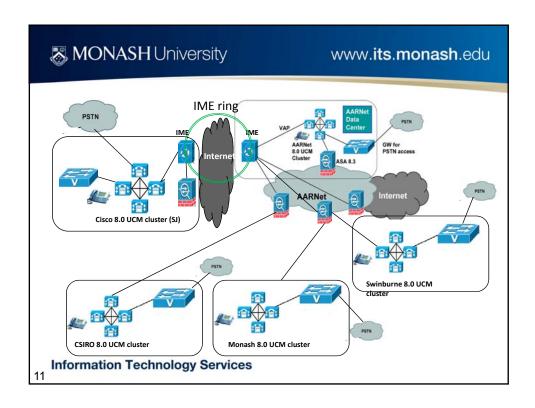
Enrolment Server hosted by GoDaddy.com

- Enrols IME servers with Certificates
- Validates all IME servers before they enter the ring of IME servers

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Benefits of Using IME

- Works with Existing phone numbers and devices
- Full Unified Communications experience
- World wide reach
- Cost saving over the Internet
- Self learning
- Secure
- Unlimited scale with any number of enterprises

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