



INTEL'S REMOTE MANAGEABILITY SOLUTIONS

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- This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

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AGENDA



- What is Intel® vPro™ Technology?
- Why and Where is it useful?
- Intel® vPro™ Platform Ingredients
- What is Intel® Active Management Technology (AMT)
- How to enable Intel® AMT
- Intel® vPro™ deployment strategy
- How to manage remote systems?
- Questions?

CHALLENGES IN RETAIL



Challenges in Visual Retail

STORE MANAGER/CUSTOMER

- My store's brand is being impacted.
- My personal images is going to be damaged
- I am NOT getting the kind of support that I need from this service provided
- Helpless feeling
- Frustrated

SERVICE PROVIDER

- How do I plan on scaling my support engineers
- Recurring cost of support is eating my profit.
- I am worried about losing business with this high value customer
- Helpless at the moment.
- Frustrated

ANSWER IS

“INTEL® VPRO™ TECHNOLOGY”



Reduce cost with Remote Management

Global IT Service Provider, **CompuCom** estimates that performing repairs remotely with Intel® vPro™ Technology can reduce per-incident costs by more than **90%**

Deskside visit: \$187

Remote repair with Intel® vPro technology : \$12

Source :Intel internal estimates, Gartner 2014 and CompuCom internal estimates.

INTEL VPRO : SECURE, FLEXIBLE AND MANAGEABLE RETAIL SOLUTION

Manageability

Intel®
Active Management Technology (AMT)

Flexibility

Intel®
Virtualization Technology (VT)

Security

Intel®
Trusted Execution Technology (TXT)

Processor



Intel® Core™ processors



Chipset



Intel® Express Chipset



Network



Intel® LAN/WLAN controller

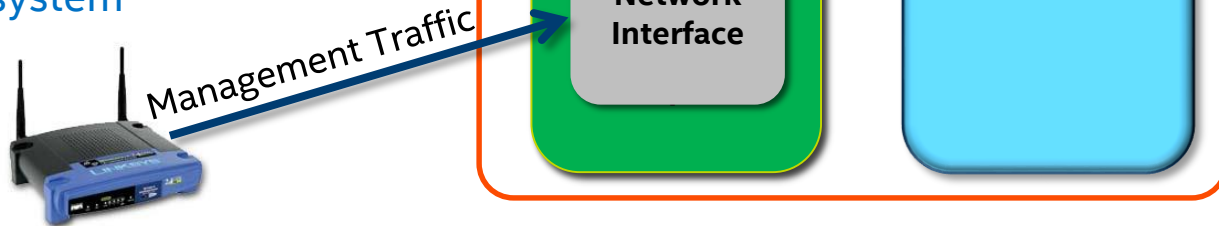
An Intel® vPro™ Platform is the sum of hardware, BIOS extensions and applications that deliver solutions for a robust and reliable retail applications



INTEL[®] ACTIVE MANAGEMENT TECHNOLOGY (INTEL[®] AMT)

INTEL® AMT MANAGEMENT PACKET ROUTING

- Management Engine sits between the network interface and the operating system
- Management traffic is handled directly by Intel® AMT Management Engine via the vPro enabled network component
- Management traffic is never seen by the operating system



KEY BENEFITS OF INTEL® AMT

Full access from Anywhere



KEYBOARD-VIDEO-MOUSE (KVM) VIEW

See and interact with a system as if physically in front of it, even if it's undergone a critical error.



IT Help Desk

See and interact as if
at the actual system

```
A problem has been detected and Windows has been shut down to prevent damage
to your computer.

The problem seems to be caused by the following file: kbdhid.sys

MANUALLY_INITIATED_CRASH

If this is the first time you've seen this stop error screen,
restart your computer. If this screen appears again, follow
these steps:

Check to make sure any new hardware or software is properly installed.
If this is a new installation, ask your hardware or software manufacturer
for any windows updates you might need.

If problems continue, disable or remove any newly installed hardware
or software. Disable BIOS memory options such as caching or shadowing.
If you need to use safe mode to remove or disable components, restart
your computer, press F8 to select Advanced Startup Options, and then
select Safe Mode.

Technical Information:

*** STOP: 0x000000e2 (0x00000000, 0x00000000, 0x00000000, 0x00000000)
*** kbdhid.sys - Address 0x94efd1aa base at 0x94efb000 DateStamp 0x4a5bc705
```



Retail Device



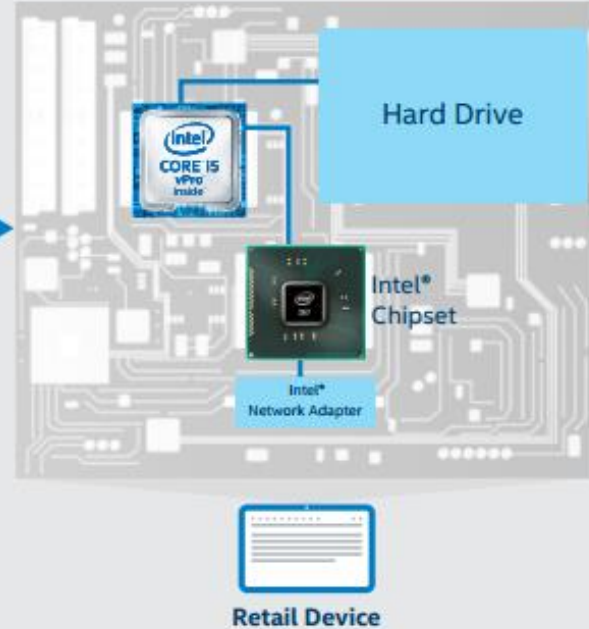
Get hardware-based control, even without an operating system

Save time and energy



SCHEDULED POWER-ON AND UPDATE

Set specific wake-up times and/or intervals to remotely deliver updates.

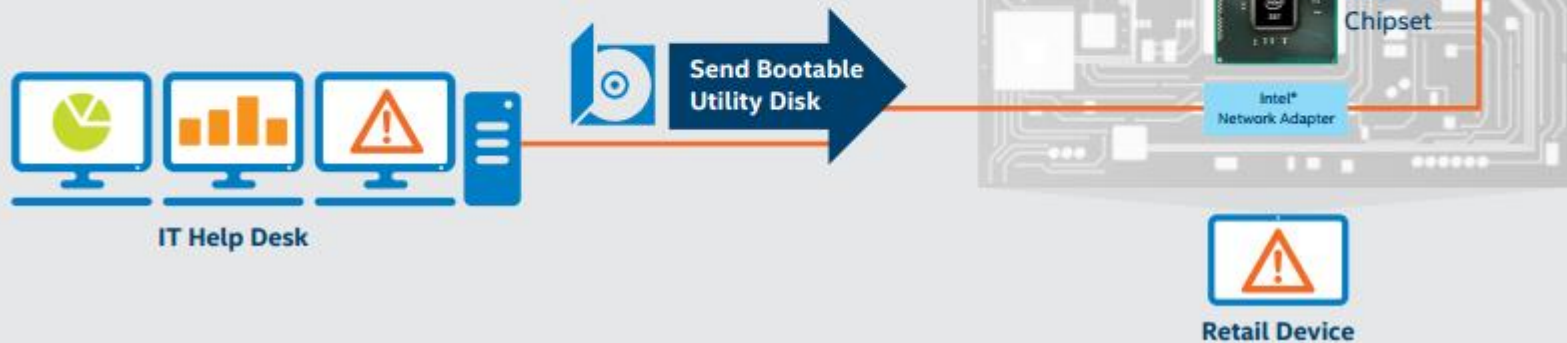


Critical security and update patches can be scheduled reducing personal costs and conserving energy

Reduce truck rolls

REMOTE REMEDIATION WITH INTEGRATED DEVICE ELECTRONICS (IDE) REDIRECT AND SERIAL OVER LAN (SOL)

Recover a faulty system without sending a technician, even if it will not boot.



➔ Boot new OS image remotely, eliminate the need to send a technician even if OS crashes

Proactive Management

CLIENT-INITIATED REMOTE ACCESS (CIRA)

Automate event logging and responses to preboot or OS errors.



➔ Always know how your systems are performing. Trigger alerts and requests before they become issues.

Additional AMT Features

- **System Defense**
- 3rd Party Data Store
- Hardware Inventory
- Agent Presence
- Audit Logging
- Event Logging

PROVISIONING INTEL® VPRO

INTEL® AMT PROVISIONING OVERVIEW

Manually Configure AMT



When entering MEBx change the following:

1st time login password : "admin" without "" → *change to desired password*

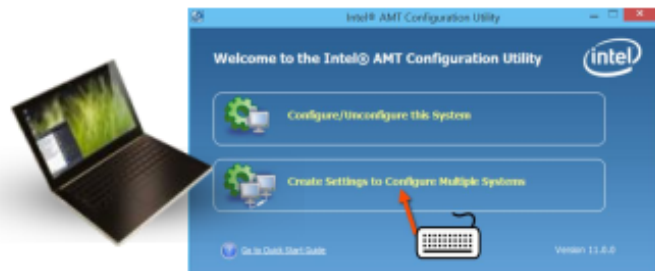
Disable KVM "opt-in"

Disable any "User Consent"

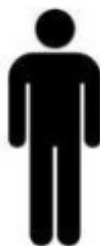
Activate "Network Access" – this enables vPro!

NOTE: Keep MEBx password in Safe place – If lost, must remove CMOS battery to clear or reflash BIOS

Enterprise mode : Setup with USB key



Intel® SCS: Create Provisioning USB Stick



Do you want to provision with USB Setup ?

"Y" = YES



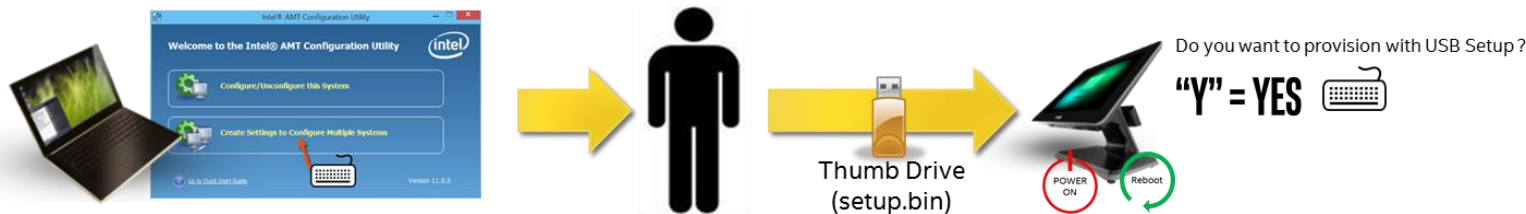
DEPLOYMENT STRATEGIES

Managed Vs Unmanaged Modes

Intel® AMT Provisioning – Managed (Traditional ISV Consoles)

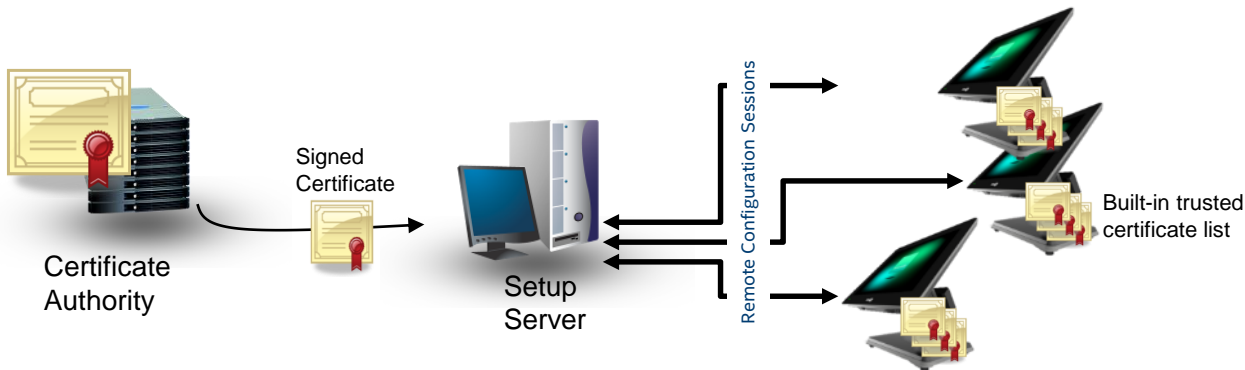
Enterprise mode, PKI/PSK setup with USB key

(Takes place of MEBx - <CTRL+P>)

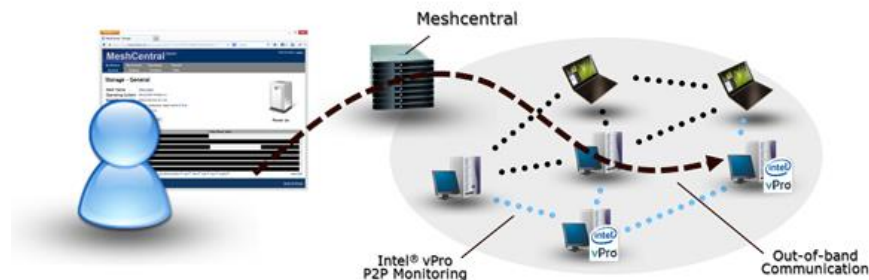


Intel® SCS: Create Provisioning USB Stick

Enterprise mode, Remote Configuration*

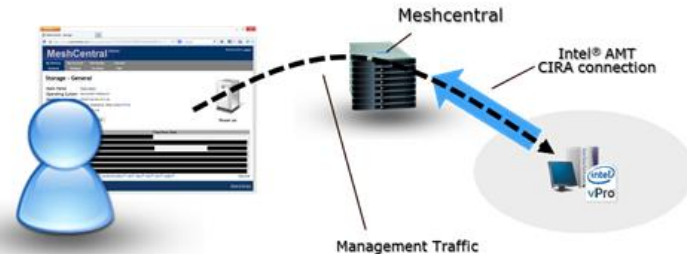


Intel® AMT Provisioning – Unmanaged (Mesh Architecture)



In-band agent: Mesh Agent
Out-of-band: AMT CIRA (Client Initiated Remote Access)

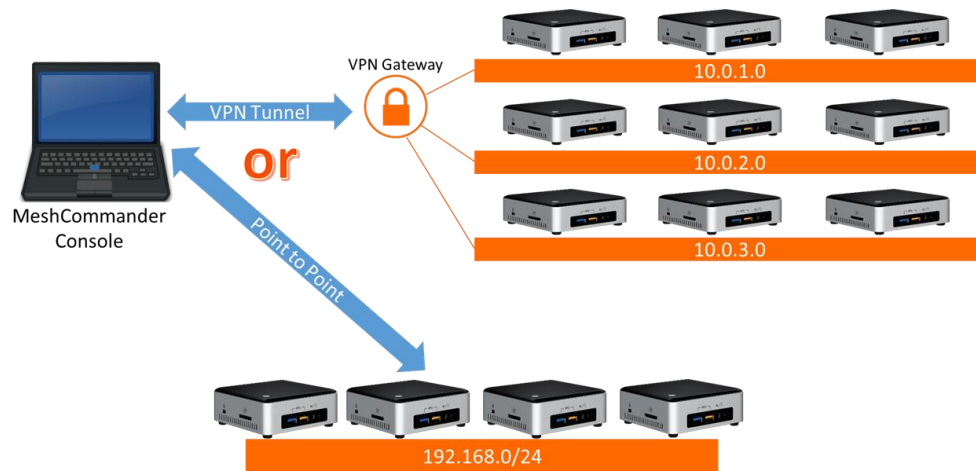
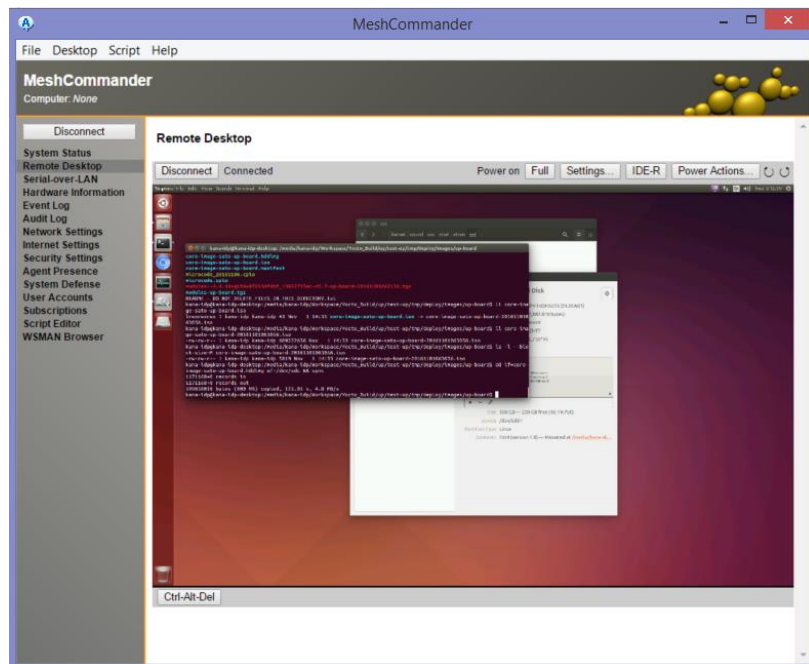
AMT CIRA will be used when vPro is activated.
Support Mesh vPro activation.*



TOOLS FOR MANAGING INTEL® AMT MACHINES

MESHCOMMANDER

OPEN SOURCE



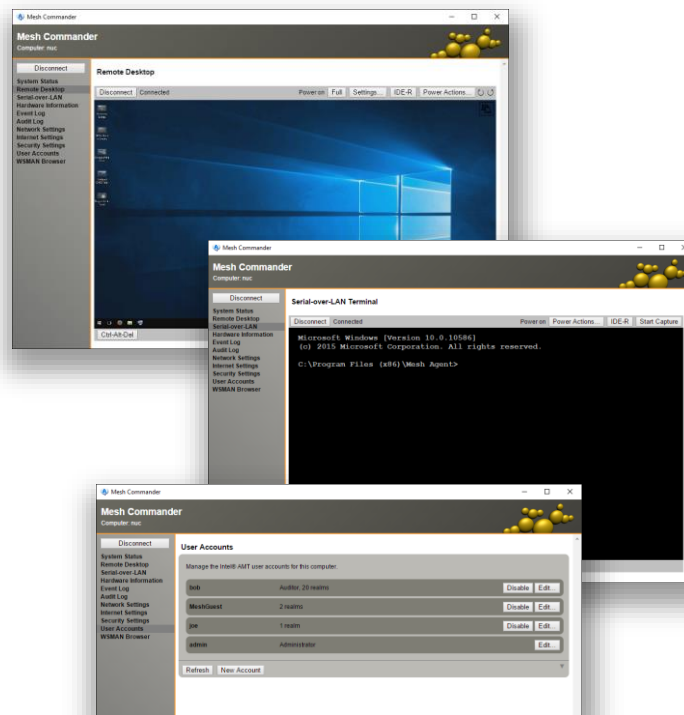
<http://info.meshcentral.com/downloads/mdtk/meshcommander.msi>

MESHCOMMANDER

Supported AMT Features

- **Hardware KVM viewer**
- Serial-over-LAN terminal
- **IDE-R support**
- **Power control**
- Event viewer
- Audit log viewer
- Hardware asset
- Account management
- **Network settings**
- WIFI management
- **System Defense**
- **User consent control**
- Enabled feature control
- Certificate & TLS management
- **CIRA & Environment Detection**
- WSMAN browser
- Alarm Clock

<http://info.meshcentral.com/downloads/mdtk/meshcommander.msi>





MESHCENTRAL

MeshCentral (WIN-FS5CD120U6G)

Welcome

Connect to your home or office devices from anywhere in the world using MeshCentral, the remote monitoring and management web site download and install a special management agent on your computers. Once installed, each mesh enabled computer will show up in the this web site and will be able to monitor them, power them on and off and take control of them.



Log In

User Name:

Password:

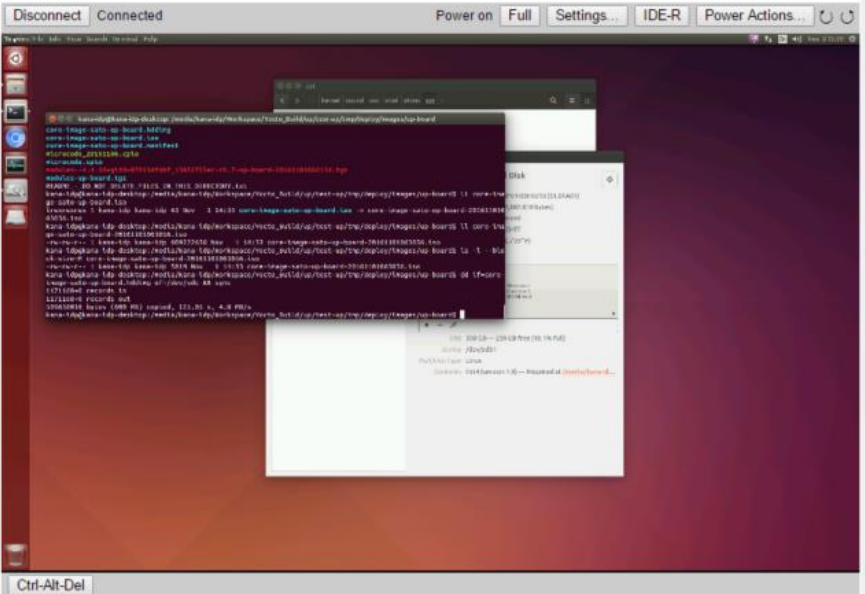
☐ Remember me next time.

Log In

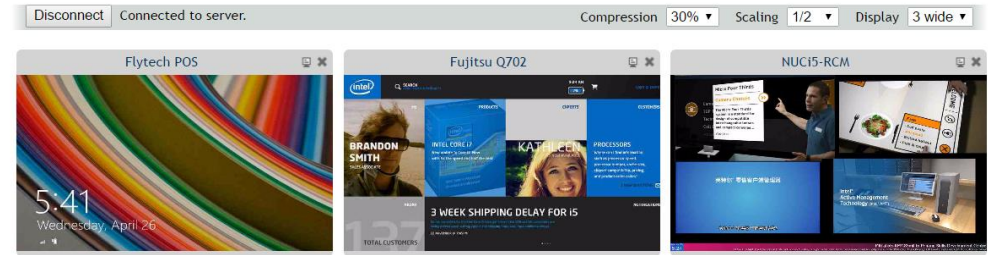
Don't have an account? [Create one.](#)

- Disconnect
- System Status
- Remote Desktop
- Serial-over-LAN
- Hardware Information
- Event Log
- Audit Log
- Network Settings
- Internet Settings
- Security Settings
- Agent Presence
- System Defense
- User Accounts
- Subscriptions
- Script Editor
- WSMAN Browser

Remote Desktop



Multi-Desktop Viewer



Please contact the vPro team for Meshcentral Enabling Guide



QUESTIONS.... ?

THANK YOU



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