

Deploying and managing Windows Information Protection (WIP)

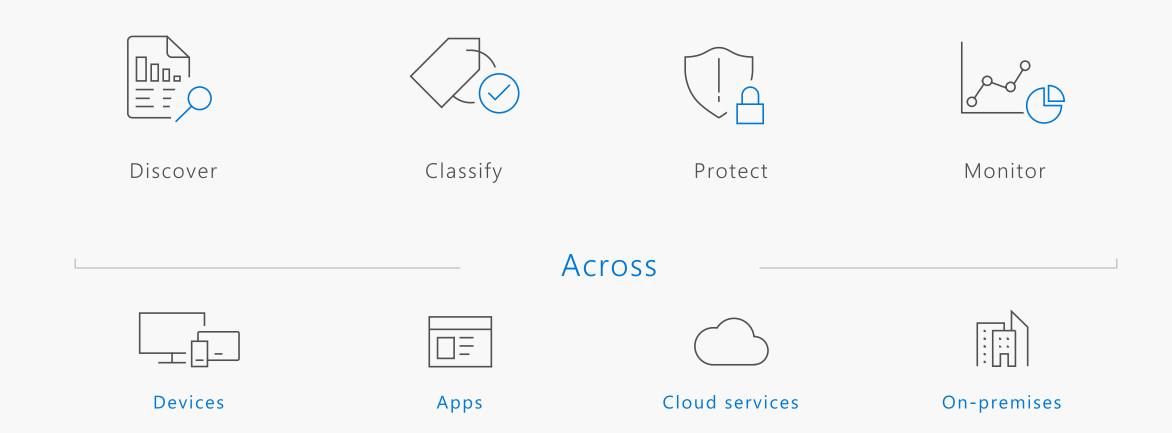
Sophie Chanialaki Partner Technical Architect, Microsoft 365





Microsoft Information Protection

Protect your sensitive data – wherever it lives or travels

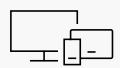


Microsoft Information Protection – the way it was





Office 365
Information Protection



Windows Information Protection







Azure Information Protection

What

Preserve or remediate emails & documents

Protect files and documents

Classify & Protect emails & documents

Where

Office 365 Apps & Services

Windows Clients & Devices

Office Clients, 3rd party Apps & Services, On Premises

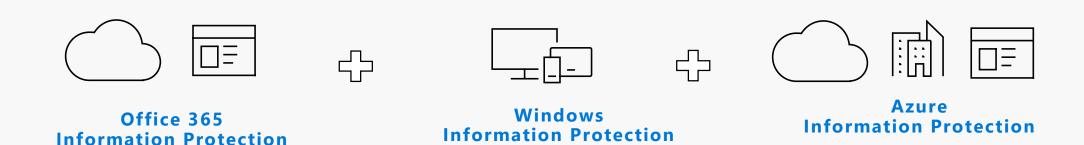
How

Office 365 Security Console

Intune Portal

AIP Portal

Microsoft Information Protection – starting today



What Consistent content detection and classification to protect and preserve sensitive data

Where Office 365 apps & services, Windows clients & desktops, mobile, on premises + 3rd party apps and services

Microsoft 365 Security and Compliance Center

How

Comprehensive set of capabilities

AZURE INFORMATION PROTECTION

Classify, label & protect files – beyond Office 365, including on-premises & hybrid

MICROSOFT CLOUD APP SECURITY

Visibility into 15k+ cloud apps, data access & usage, potential abuse

OFFICE 365 DATA LOSS PREVENTION

Prevent data loss across Exchange Online, SharePoint Online, OneDrive for Business

OFFICE 365 MESSAGE ENCRYPTION

Send encrypted emails in Office 365 to anyone inside or outside of the company

WINDOWS INFORMATION PROTECTION

Separate personal vs. work data on Windows 10 devices, prevent work data from traveling to non-work locations

OFFICE 365 ADVANCED DATA GOVERNANCE

Apply retention and deletion policies to sensitive and important data in Office 365

MICROSOFT INFORMATION PROTECTION

Discover | Classify | Protect | Monitor

CONDITIONAL ACCESS

Control access to files based on policy, such as identity, machine configuration, geo location

OFFICE APPS

Protect sensitive information while working in Excel, Word, PowerPoint, Outlook

SHAREPOINT & GROUPS

Protect files in libraries and lists

AZURE SECURITY CENTER INFORMATION PROTECTION

Classify & label sensitive structured data in Azure SQL, SQL Server and other Azure repositories

SDK FOR PARTNER ECOSYSTEM & ISVs

Enable ISVs to consume labels, apply protection

ADOBE PDFs

Natively view and protect PDFs on Adobe Acrobat Reader

YOUR INFORMATION PROTECTION NEEDS

DEVICE PROTECTION

DATA SEPARATION

LEAK PROTECTION

SHARING PROTECTION

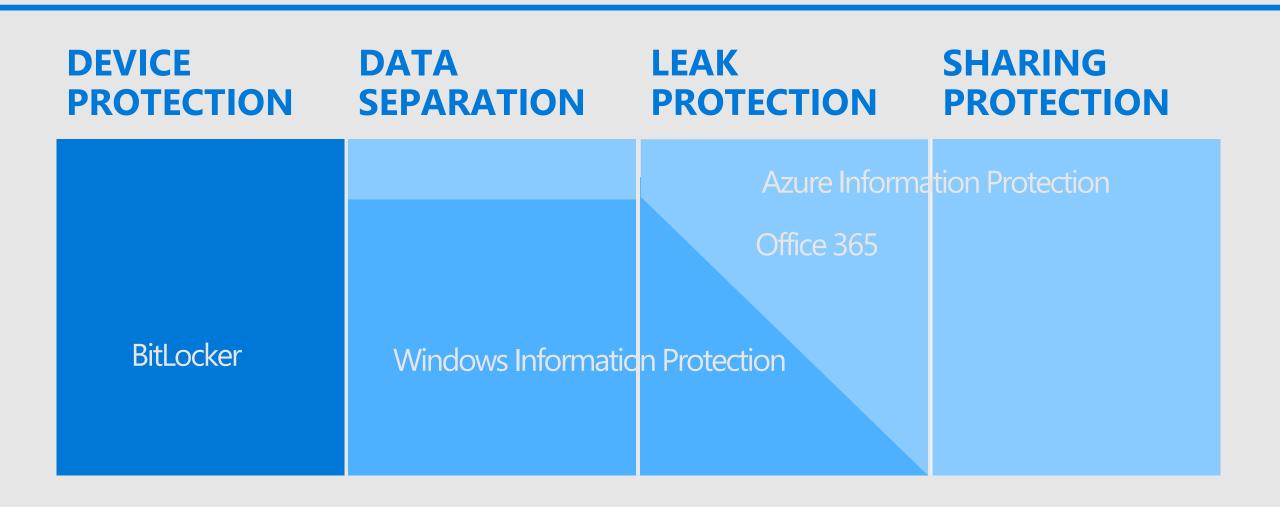
Protect system and data when device is lost or stolen

Containment

Data separation

Prevent unauthorized users and apps from accessing and leaking data Protect data when shared with others, or shared outside of organizational devices and control

YOUR INFORMATION PROTECTION NEEDS



Comprehensive set of capabilities

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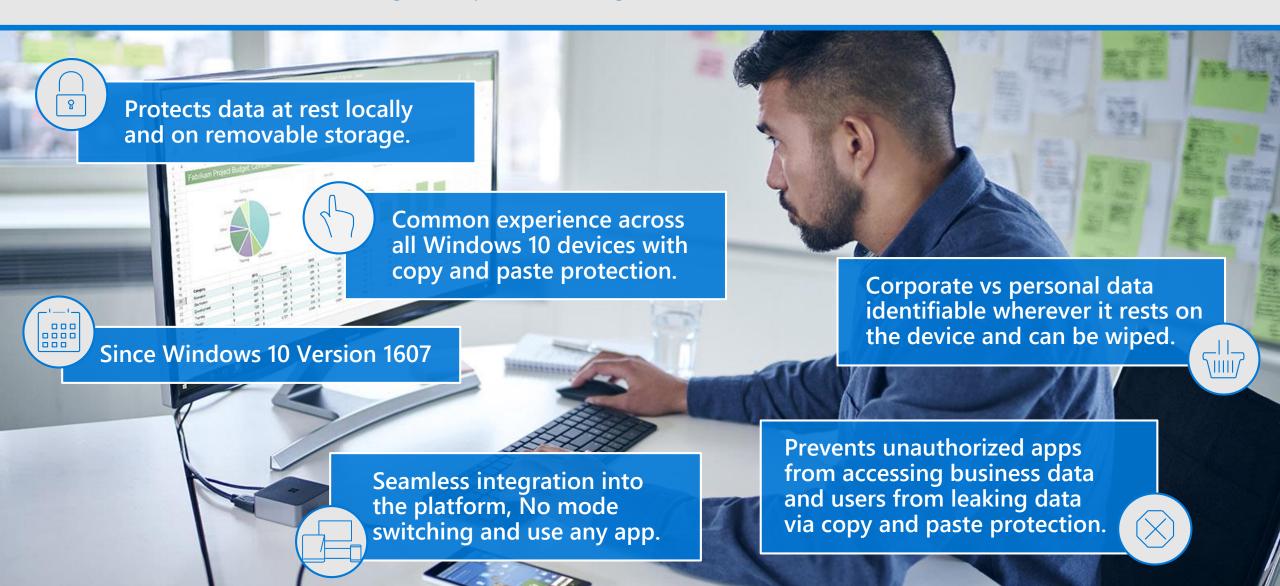
Enable ISVs to consume labels, apply protection

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Natively view and protect PDFs on Adobe Acrobat Reader

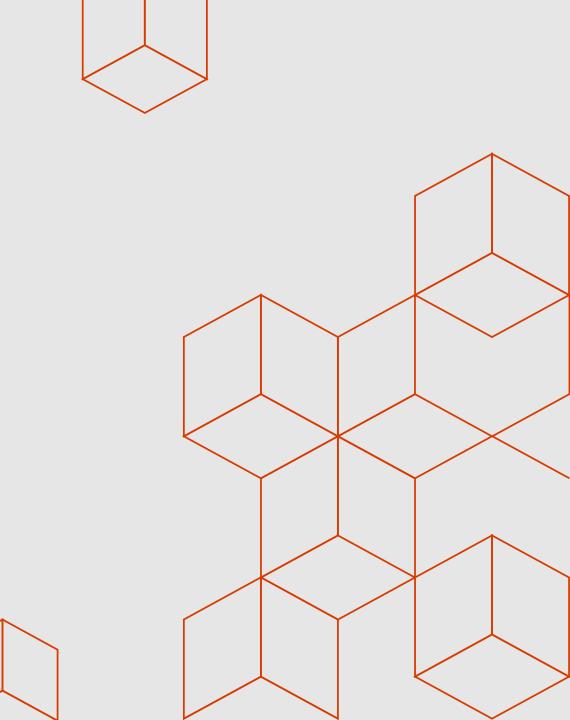
WINDOWS INFORMATION PROTECTION

Integrated protection against accidental data leaks

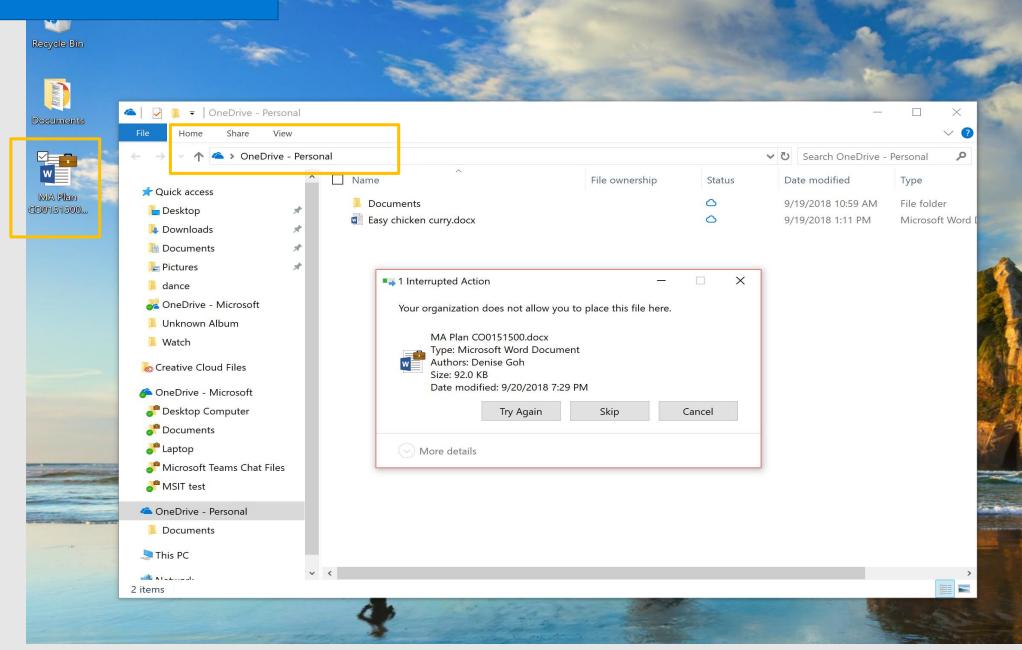


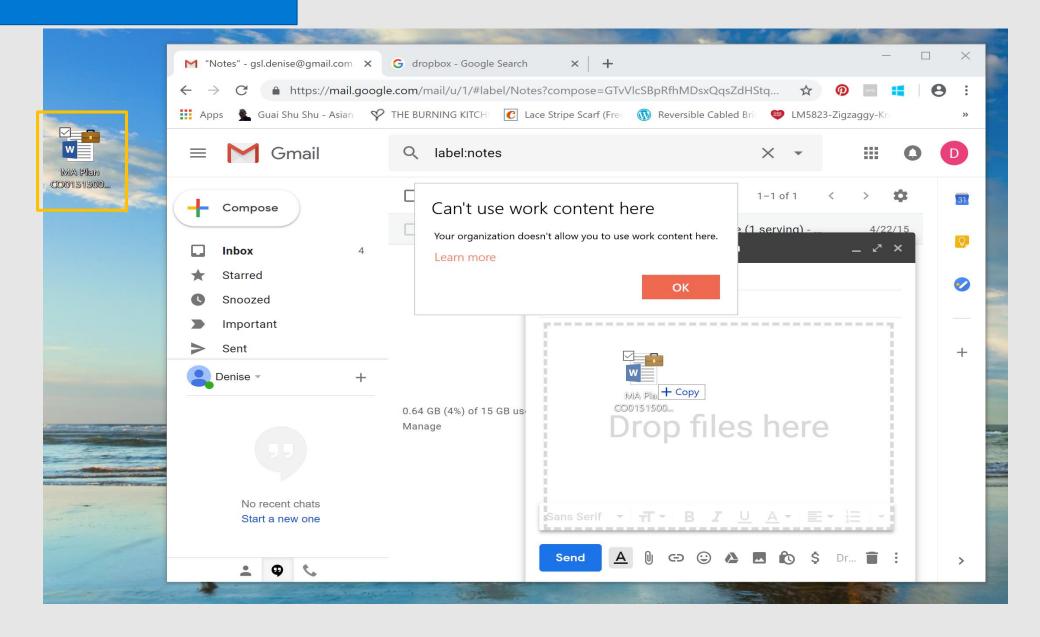


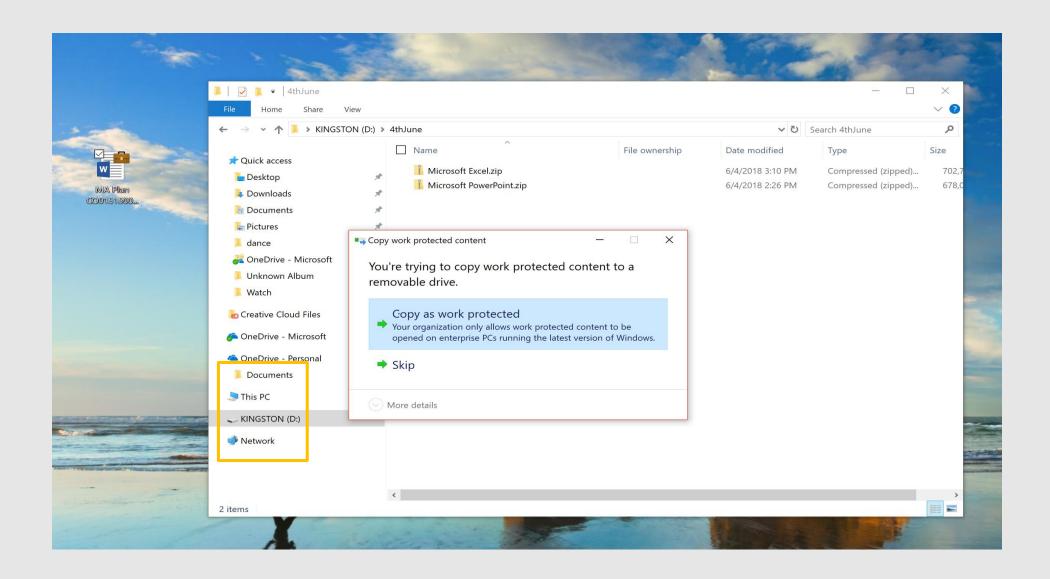
Windows Information Protection Client



WIP – Copying Highly Confidential file to Personal One Drive







Business/Personal

One experience



Business/Personal

One experience

Data is isolated

Data is encrypted at rest

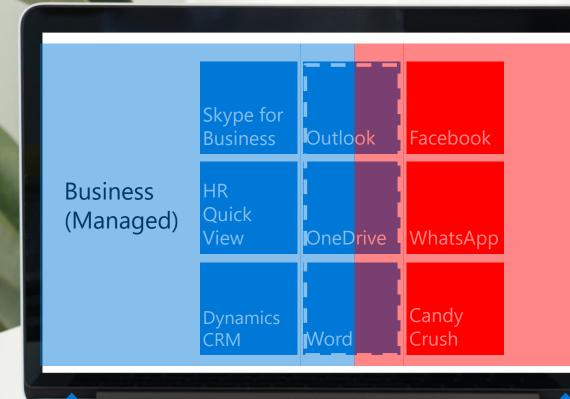
Organization holds keys

MDM / MAM managed

Block/audit data exchange

APIs for ISVs

Office and OneDrive



Personal (Unmanaged)



Data exchange is blocked or audited

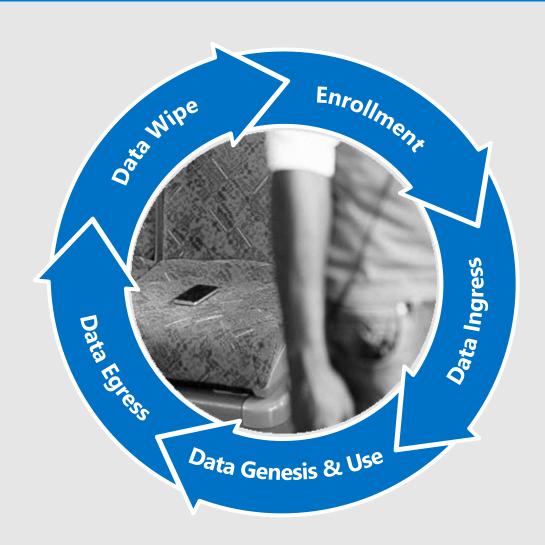
Enlightened Applications



Unenlightened Applications – How to manage

- Option 1: Use Allow policy
 - · Caution: Auto-encrypts all files touched
 - Intended for Line of Business (LOB) apps
 - · Can include in policy for fully managed devices
- Option 2: Use Exempt policy
 - WIP rules don't apply to the app
 - · Access work without impacting personal data
- Option 3: Enlighten the app
 - See: http://aka.ms/wip-dev-guide

WINDOWS INFORMATION PROTECTION LIFECYCLE



Policy and keys provisioned to device

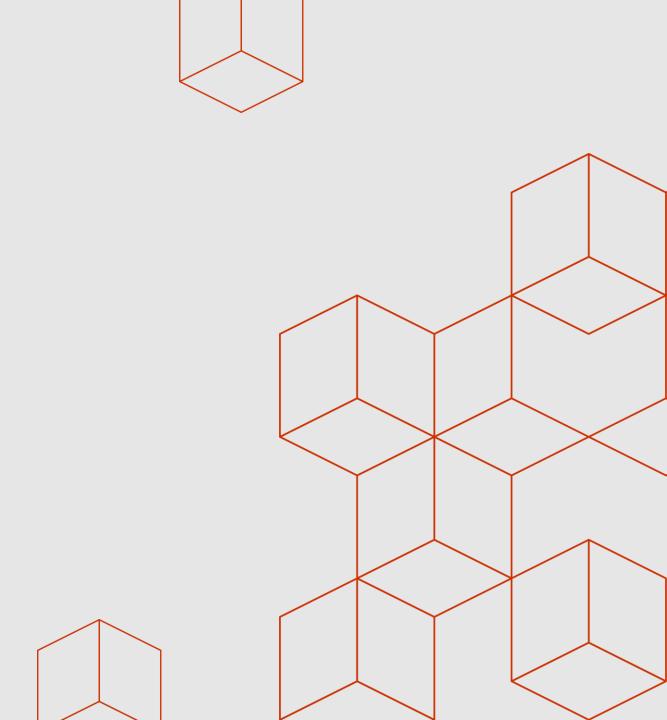
Data coming from corporate network location automatically protected by WIP

App can automatically protect data or users can define data as personal or corporate

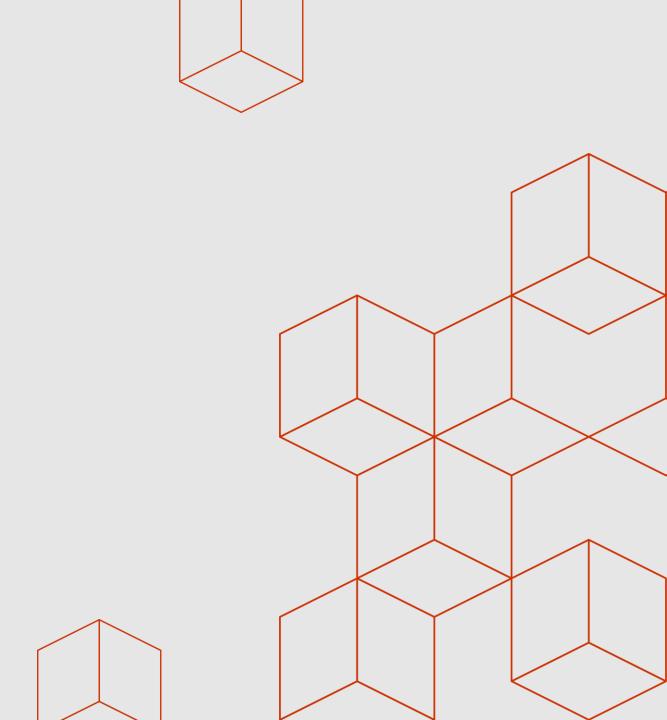
Protection can be maintained anywhere on the device or when data moves to removable storage. Azure Information Services can be used maintain protection in B2B scenarios.

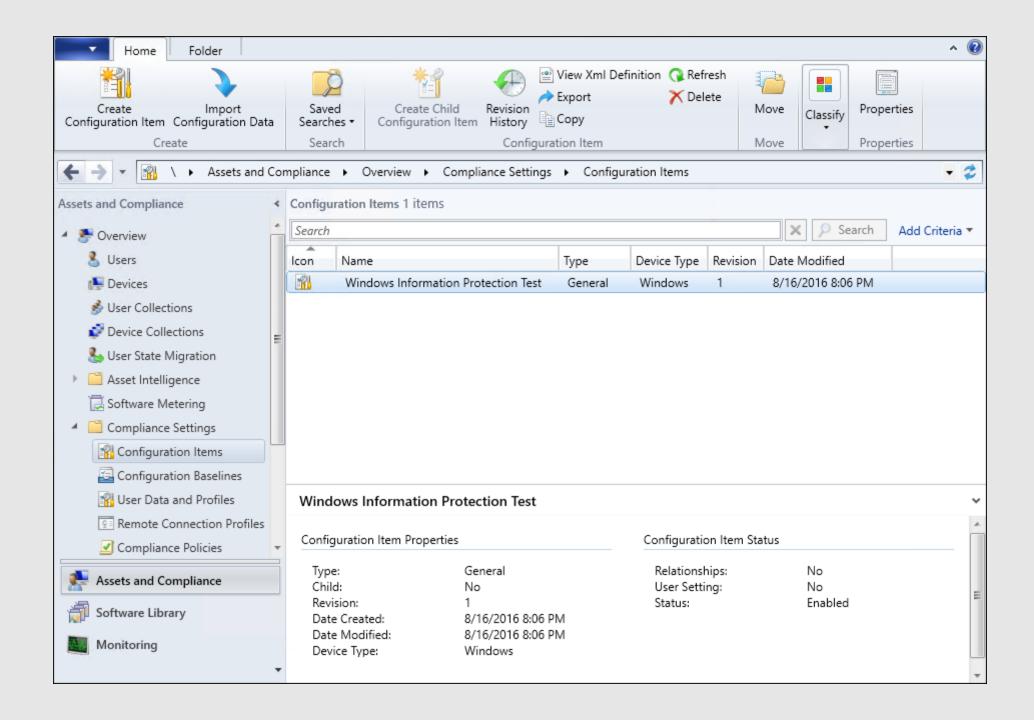
Selectively wipe corporate data on demand or when device is unenrolled

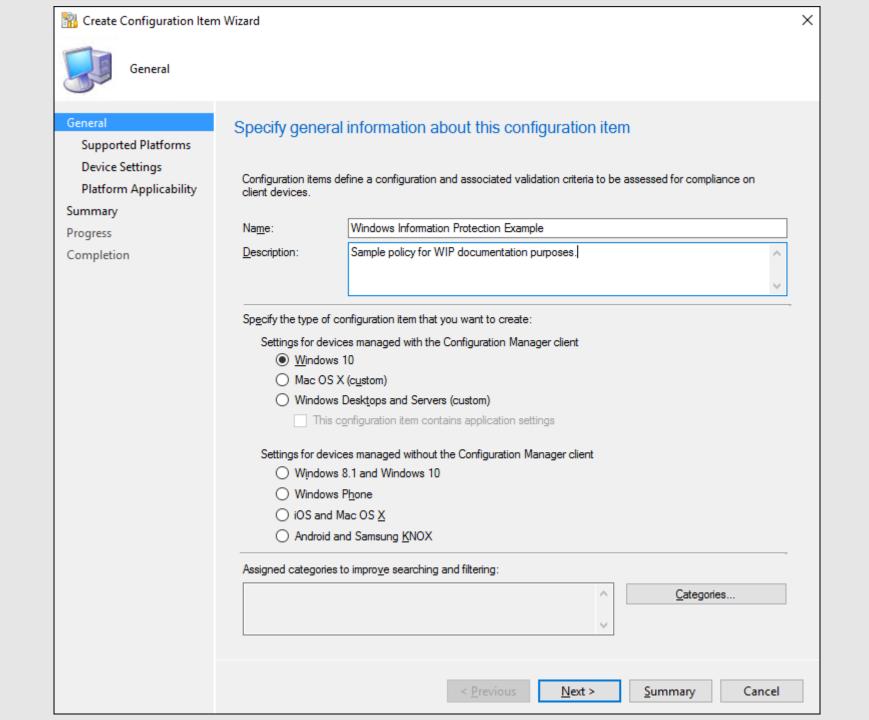
Demo – Intune

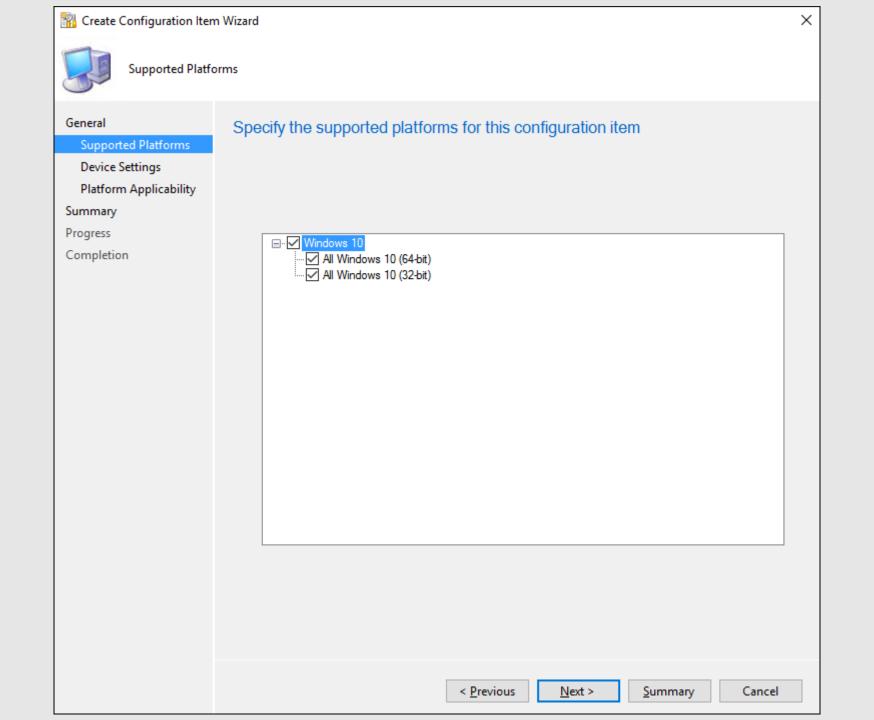


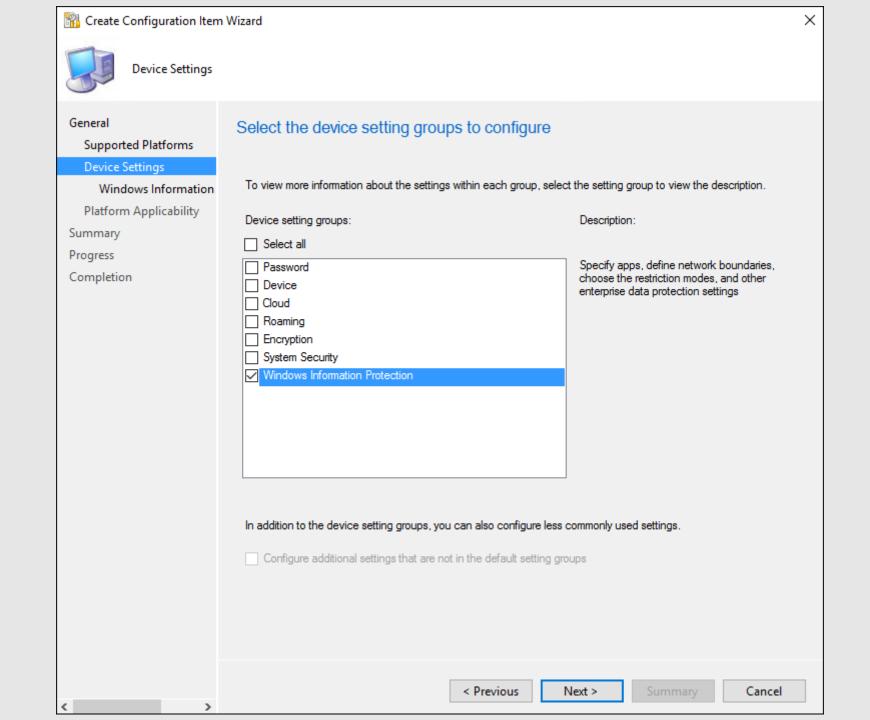
Demo – SCCM

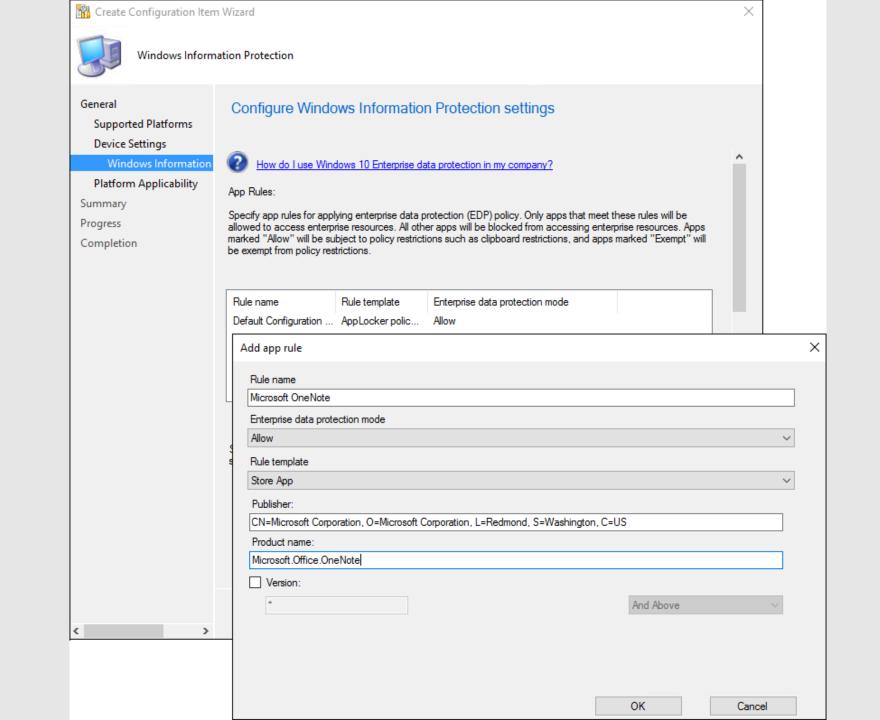


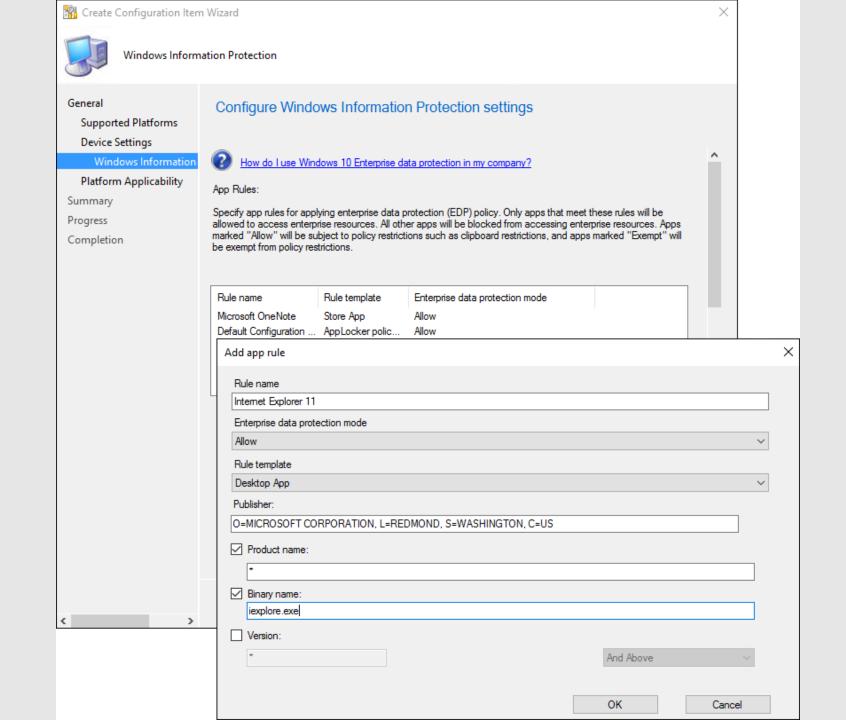


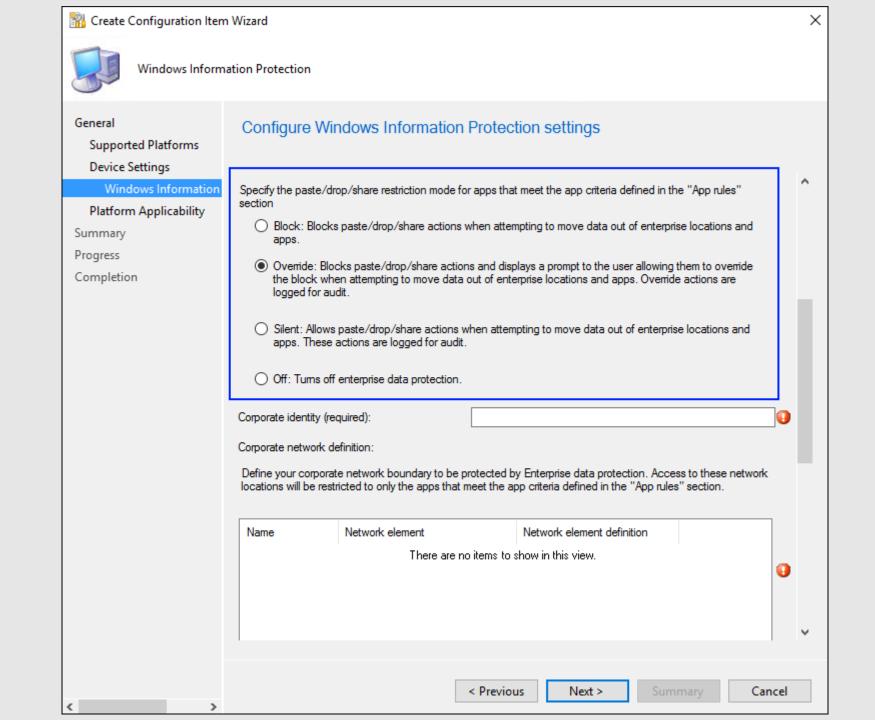


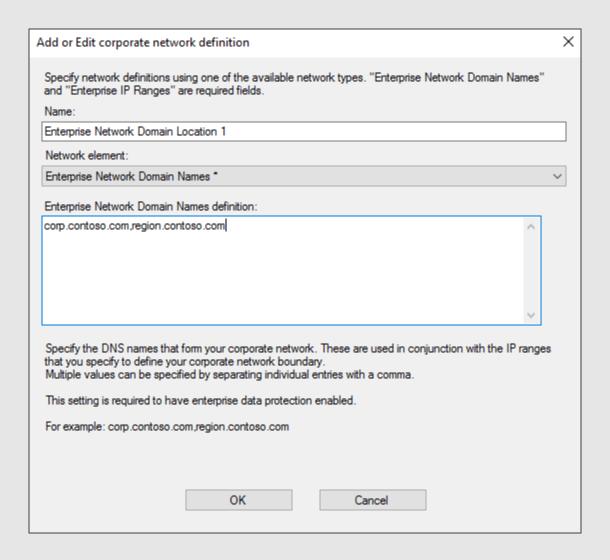






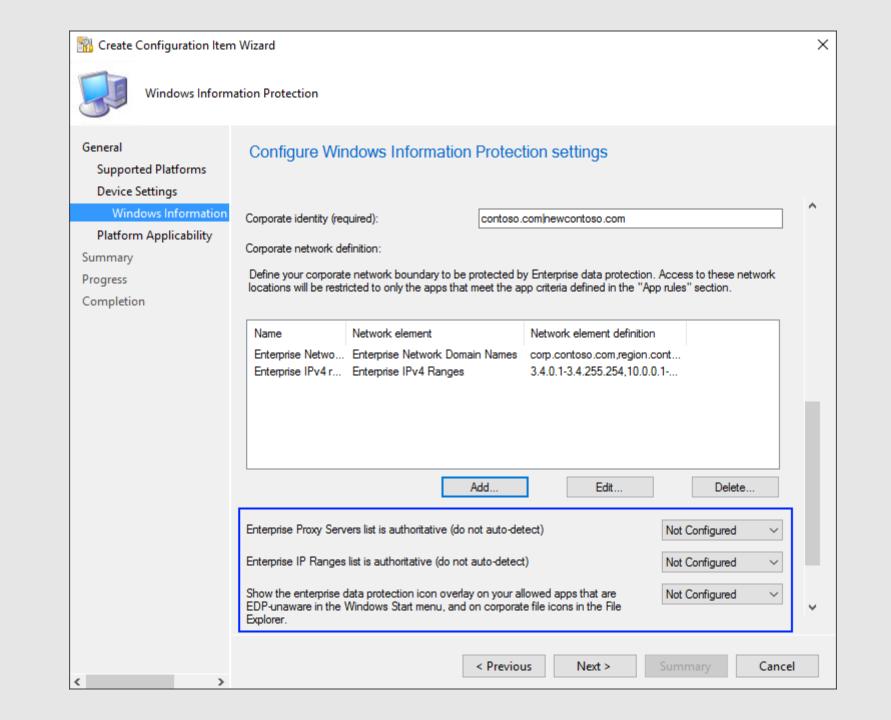


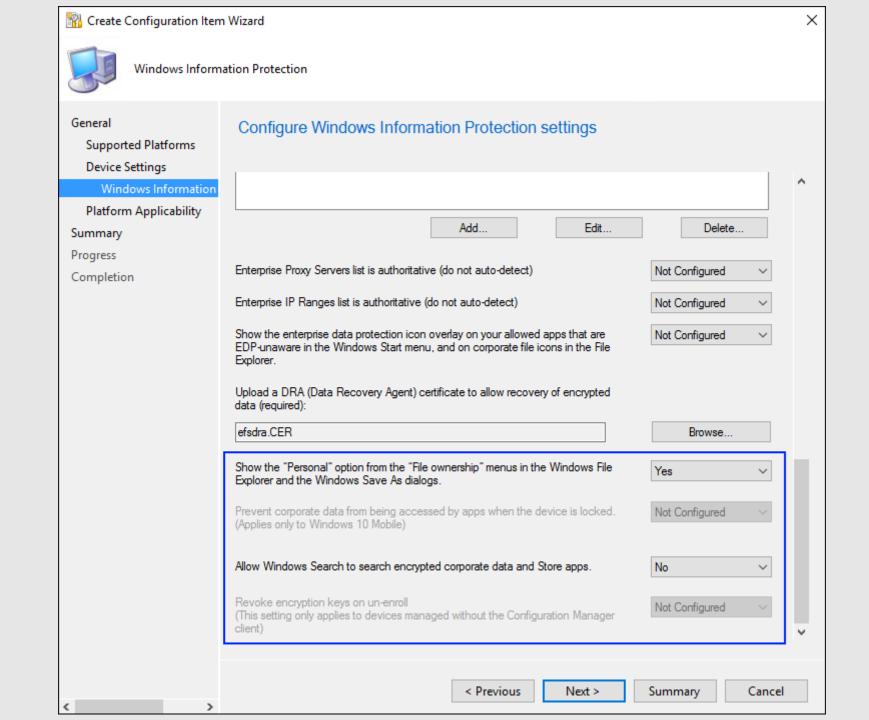


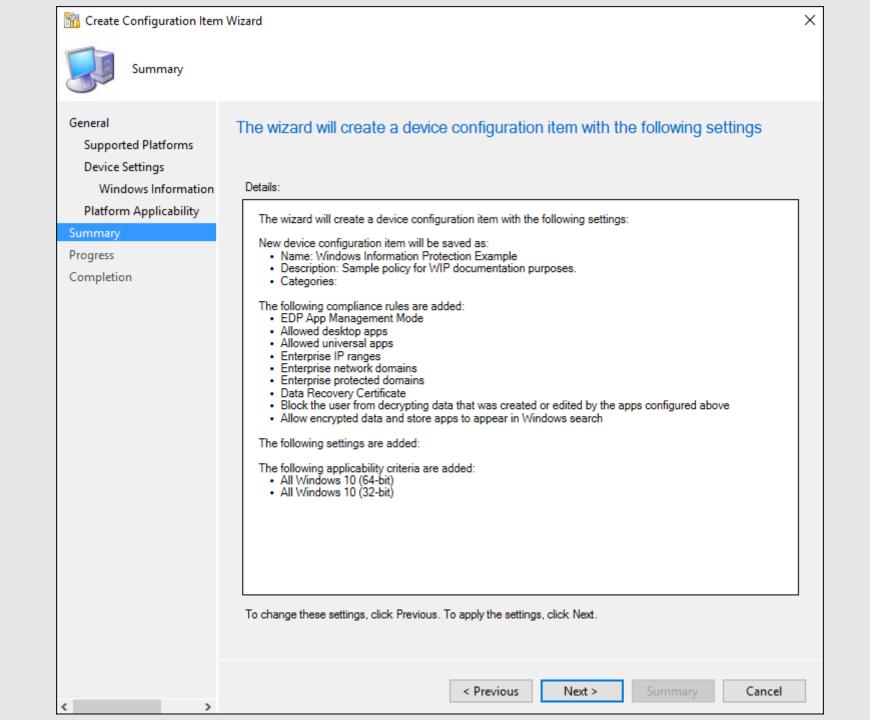


Network location		
type	Format	Description
Enterprise Cloud	With proxy: contoso.sharepoint.com,contoso.internalproxy1.com	Specify the cloud resources to be treated as corporate and protected by WIP.
Resources	contoso.visual studio.com, contoso.internal proxy2.com	For each cloud resource, you may also optionally specify a proxy server from your Internal proxy servers list to route traffic
	Without proxy: contoso.sharepoint.com contoso.visualstudio.com	for this cloud resource. Be aware that all traffic routed through your Internal proxy servers is considered enterprise.
		If you have multiple resources, you must separate them using the " " delimiter. If you don't use proxy servers, you must also include the "," delimiter just before the " ". For example:
		<pre>URL <,proxy> URL <,proxy> .</pre>
		Important In some cases, such as when an app connects directly to a cloud
		resource through an IP address, Windows can't tell whether it's attempting to connect to an enterprise cloud resource or to a personal site. In this case, Windows blocks the connection by
		default. To stop Windows from automatically blocking these connections, you can add the /*AppCompat*/ string to the
		setting. For example:
		<pre>URL <,proxy> URL <,proxy> /*AppCompat*/ .</pre>
Enterprise Network Domain	corp.contoso.com,region.contoso.com	Specify the DNS suffixes used in your environment. All traffic to the fully-qualified domains appearing in this list will be protected.
Names		This setting works with the IP ranges settings to detect whether
(Required)		a network endpoint is enterprise or personal on private networks.
		If you have multiple resources, you must separate them using the "," delimiter.
Proxy servers	proxy.contoso.com:80;proxy2.contoso.com:443	Specify the proxy servers your devices will go through to reach your cloud resources. Using this server type indicates that the cloud resources you're connecting to are enterprise resources.
		This list shouldn't include any servers listed in your Internal
		proxy servers list. Internal proxy servers must be used only for WIP-protected (enterprise) traffic.

Internal proxy servers	contoso.internalproxy1.com;contoso.internalproxy2.com	Specify the internal proxy servers your devices will go through to reach your cloud resources. Using this server type indicates that the cloud resources you're connecting to are enterprise resources.
		This list shouldn't include any servers listed in your Proxy servers list. Proxy servers must be used only for non-WIP-protected (non-enterprise) traffic.
		If you have multiple resources, you must separate them using the ";" delimiter.
Enterprise IPv4 Range (Required)	Starting IPv4 Address: 3.4.0.1 Ending IPv4 Address: 3.4.255.254 Custom URI: 3.4.0.1-3.4.255.254, 10.0.0.1-10.255.255.254	Specify the addresses for a valid IPv4 value range within your intranet. These addresses, used with your Enterprise Network Domain Names, define your corporate network boundaries. If you have multiple ranges, you must separate them using the "," delimiter.
Enterprise IPv6 Range	Starting IPv6 Address: 2a01:110:: Ending IPv6 Address: 2a01:110:7fff:ffff:ffff:ffff:fffff: Custom URI: 2a01:110:7fff:ffff:ffff:ffff; fd00::-fdff:ffff:ffff:ffff:ffff:ffff	Specify the addresses for a valid IPv6 value range within your intranet. These addresses, used with your Enterprise Network Domain Names, define your corporate network boundaries. If you have multiple ranges, you must separate them using the "," delimiter.
Neutral Resources	sts.contoso.com,sts.contoso2.com	Specify your authentication redirection endpoints for your company. These locations are considered enterprise or personal, based on the context of the connection before the redirection.
		If you have multiple resources, you must separate them using the "," delimiter.

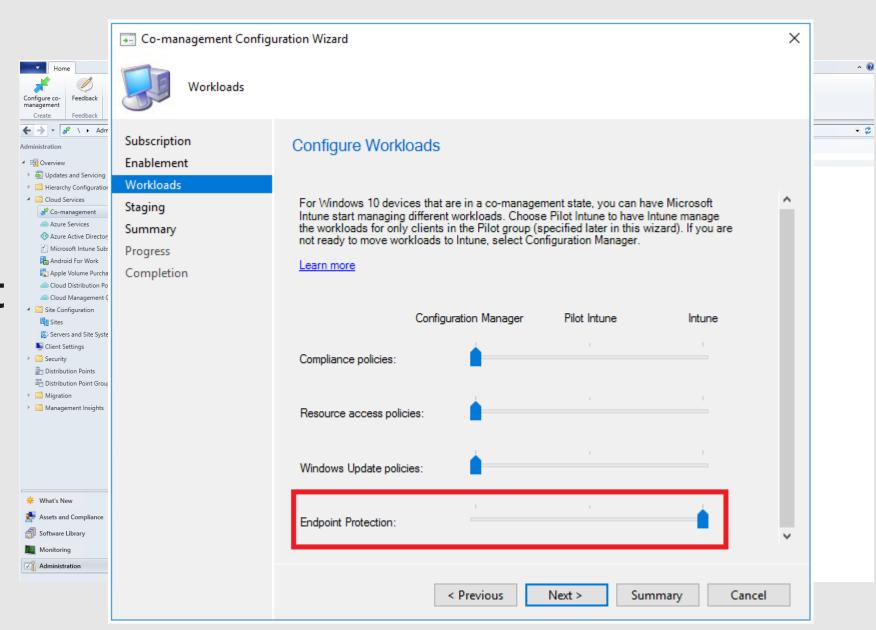






SCCM 1802

Co-management with Intune



Windows Information Protection +
Azure Information Protection





WIP & AIP - v1607: Side by side

WIP

- Basic, context-aware protection
- User action <u>not</u> needed for protection
- Clipboard, etc., is seamless Work ←→Work
- Protected sharing via corp servers

AIP

- Granular, app-level, policy-based protection
- Requires user action

Side-by-side technologies, different keys, complementary scenarios

WIP & AIP – v1703: USB roaming

What you get

- WIP uses Azure RMS key on removable storage
- Auth to Azure RMS, opens on v1703 and later PCs
- Tenant-wide user access by default
 - Can adjust access with RMS templates

What you need

- Configure WIP to use AIP for removable media (E3 subscription)
- Creators Update (v1703) or later client

WIP & AIP – v1809: WIP as label outcome

What you get

- WIP applied to labeled files on create/modify/arrival
- Set via Office/M365 Security & Compliance Center (SCC)

What you need

- Office/M365 Security & Compliance Center
- Windows 10 v1809 client
- Windows Defender Advanced Threat Protection (E5 subscription)

MAM Without enrollment (1703)

- MAM without enrollment limits policy scope
 - Does not turn on device-wide policies
- WIP is "app management" part of MAM-only
- Only enlightened* apps can be managed
- Requires AAD integration
- Home/Pro/Enterprise

WIP Learning (1703)

- Detects unknown apps accessing work
- Intune stores learning data for two weeks
- Azure Log Analytics stores data up to a year
- Works in all enforcement levels
- Gives deployment confidence
 - Know when rules are complete
 - Can stay up to date with changes

Data based on last 7 days 🚇 😲 🔯 🛈







Data Plan: Free Windows-Analytics-Demo

Overview Device Health (Preview)

Time: Last 7 days

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DEVICE RELIABILITY

Device Reliability <u>_</u>

10K 1.2K WITH CRASHES

FREQUENTLY CRASHING DEVICES

DRIVER-INDUCED OS CRASHES

Devices crashed by drivers

WIP App Learning

WINDOWS INFORMATION PROTECTION

More info →

APP LEARNING

events

access events

Overview

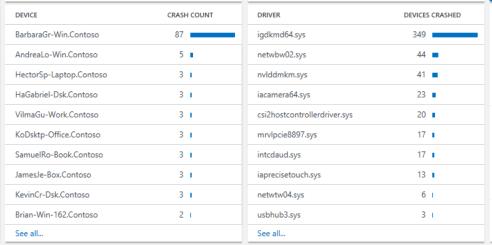
These reports provide you with insights into operating system kernel crashes (blue screens) in your organization so that you can take actions to reduce them.

Frequently crashing devices

See which devices are crashing the most; flattening or replacing outliers may help increase average device reliability. The chart at the top shows daily counts of devices with at least one crash in the prior two weeks. The list at the bottom shows devices with the most crashes in the last week.

Driver-induced OS crashes

See which drivers have caused the most devices to crash in



Overview

Windows Information Protection (WIP) helps protect work data from accidental sharing.

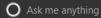
Your IT department configures which apps are allowed to access work data, and controls the level of protection.

App Learning

Display details about all unconfigured apps on managed devices that try to access work data, and reduce disruptive prompts by adding rules to allow data sharing from approved apps.

APP	DEVICES
GOOGLE CHROME (CHROME.E	99
SURFACE (SURFACEDTX.EXE)	41
MICROSOFT OFFICE 2016 (LYN	28
LENOVO PLATFORM SERVICE (17 💻
MICROSOFT.MICROSOFTEDGE	14 🔳
NOTEPAD++ (NOTEPAD++.EXE)	14 🔳
MICROSOFT.SKYPEAPP	14 🔳
SKYPE (SKYPE.EXE)	14 🔳
MICROSOFT OFFICE 2016 (UC	12 ■
MICROSOFT® SILVERLIGHT	9 ■
See all	







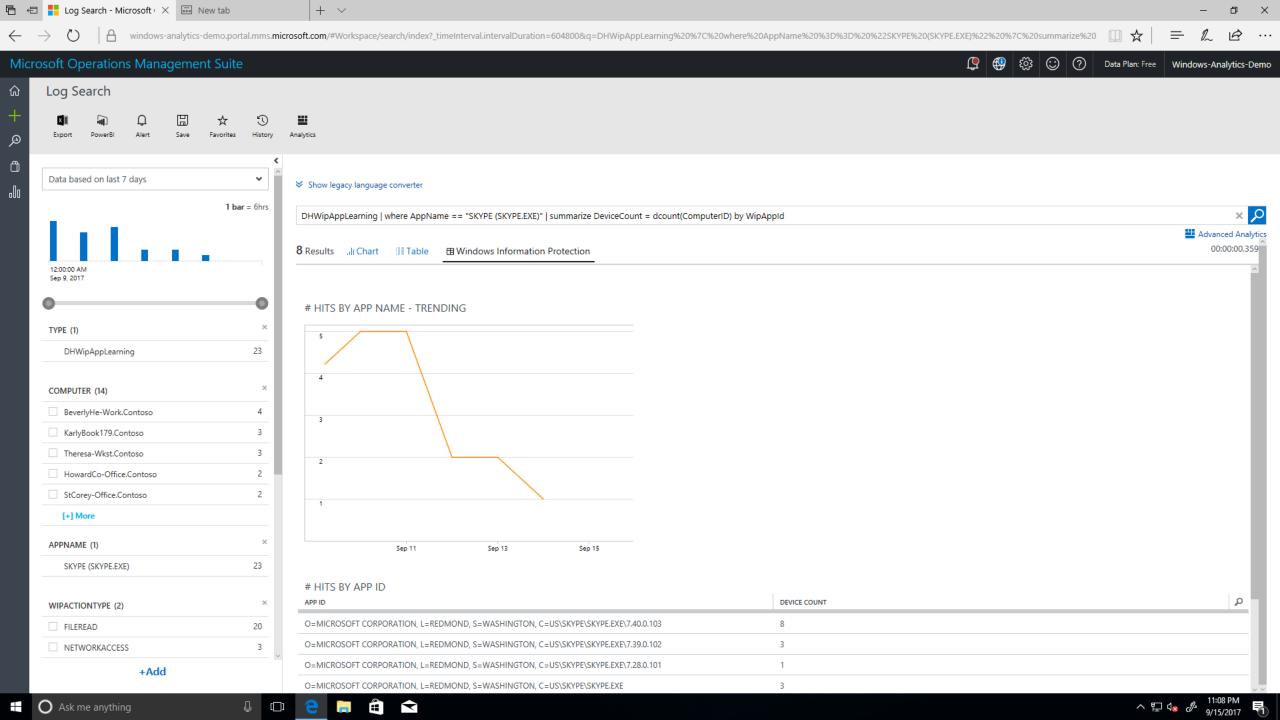












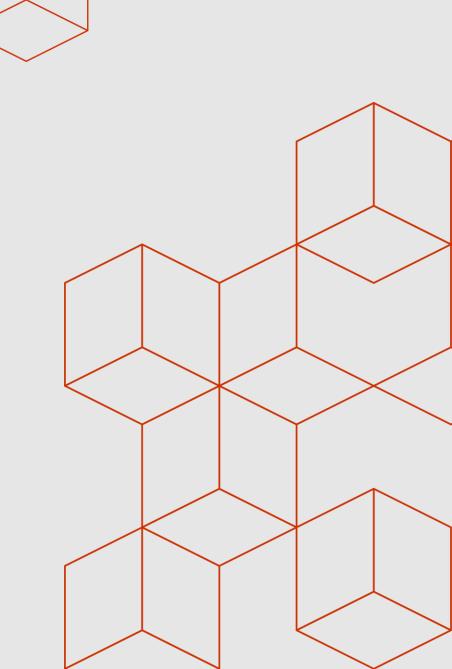
Automatic Recovery (1709)

- If you revoke the wrong device ...
- ...User just re-enrolls to restore access
- PC backs up key to AAD user account

Office, Intune, and SCCM

- WIP support in Office 365 ProPlus
- Intune enhancements
 - MAM "without enrollment" support
 - One click to allow all recommended apps
 - Auto-populates SharePoint sites to cloud resources
- SCCM 1706 enables WIP USB roaming
- SCCM 1802 enables WIP co-management
- Office 365 MIP label support

Example Deployment Options



Quick Start: No prompts, Selective Wipe only

What you get...

- · All apps still "just work" no blocks or copy/paste prompts
- SharePoint, OneDrive, and Outlook email are encrypted
- Encryption retained on copy to USB
- · Learn which apps are used for work
- Audit file decryption & Edge uploads outside SPO
- Data is revoked on BYOD unenroll / retire

Quick Start: No prompts, Selective Wipe only

How to configure...

Apps: Allow Recommended apps

· Enforcement: Silent

Network: SharePoint online sites (preconfigured by Intune)

Email address domains (primary pre-added by Intune)

Recommended Neutral Sites (i.e. MS logon sites)

· Azure RMS: On (no template needed)

• Other: Defaults

(If Windows 10 < 1709, include DRA)

Light enforcement: Only enforce some apps

What you get...

- · Selected apps prompt for disclosure, rest "just work"
- More data auto-encrypted: LOB apps' files & LAN d/l
- Encryption kept by default on USB copy
- · Audit: Decryption, Edge uploads, and paste disclosures
- Revoke data on unenroll for BYOD

Light enforcement: Only enforce some apps

How to configure...

· Apps: Allow Recommended apps, plus LOBs

Explicitly Deny social media apps

Deny Exemption to your Allowed & Denied apps

Exempt everything else

Enforcement: Allow Overrides

Network: As Quick Start + LAN config

· Azure RMS: On

Other: As Quick Start

(Optional: Define file types to encrypt from LAN)

Strict enforcement: Fully managed, work only

What you get...

- · Only your apps open work files and LAN file shares
- · Most data auto-encrypted: Files in user profile
- Encryption kept on USB copy

Strict enforcement: Fully managed, work only

Configure in SCCM...

· Apps: Allow Recommended apps, plus LOBs

Exempt apps as needed

· Enforcement: Hide Overrides (a.k.a. "Block")

Network: (As Light Enforcement)

· Azure RMS: On

Other: (As Quick Start)

Non-WIP: Deploy Known Folders redirection to

OneDrive for Business

