

YOUR JOURNEY TO WINDOWS 10

THE TIMELINE

What does the migration to Windows 10 look like? What aspects of your IT should you be considering and in what order? In this article we break down the main steps of your journey to Windows 10 in a useful timeline of key decisions and activities.



Softcat

IT PRIORITIES
digital workspace

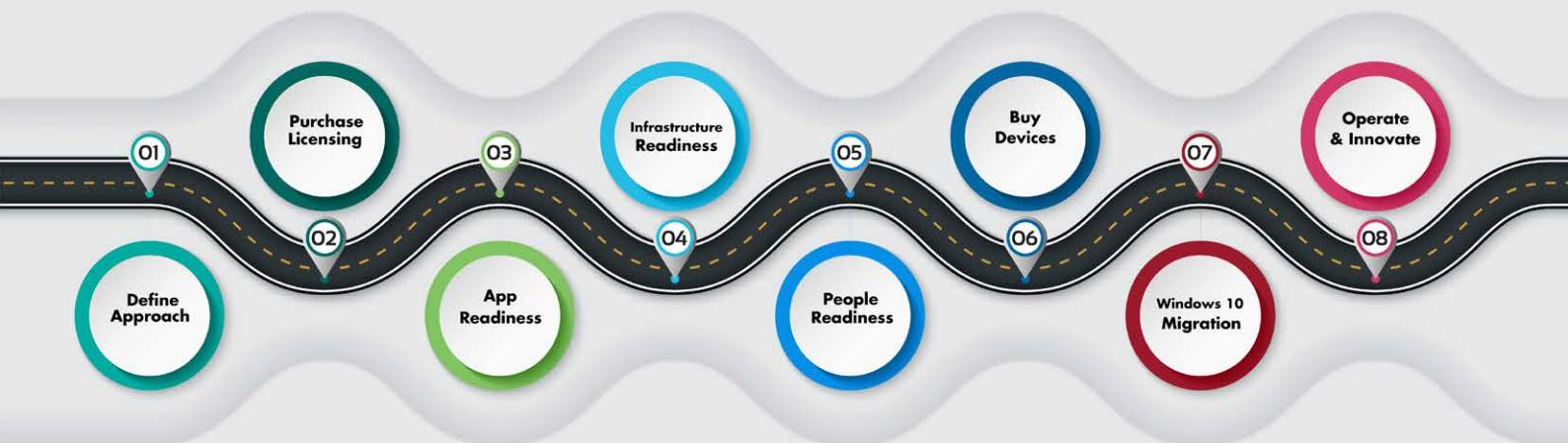
softcat.com/upgrade-to-windows-10

Contents

Your Journey to Windows 10	3
Step 1 Define approach: Which version of Windows is right for me?	4
How should I deploy, manage and secure Windows 10?	5
Step 2 Procurement Options	6
Step 3 Application Readiness Guidance.....	7
Step 4 Infrastructure Readiness Guidance	8
Step 5 People Readiness Guidance	10
Step 6 Buying Devices	11
Step 7 Windows 10 Migration.....	13
Step 8 Operate and Innovate	15
Helpful Resources	16

Your eight-step journey to Windows 10

We recommend eight key stages that'll make your journey to **Windows 10** seamless, efficient and hassle free. Ensure you and your employees feel ready to tackle this new way of working by following the **eight steps outlined below**.





Step 1 Define approach

Which version of Windows is right for me?

Most business laptops come with Windows 10 Pro as an OEM entitlement, **so why do we recommend upgrading** to Windows 10 Enterprise, E3 or E5?

We've put together some of the key features that are included within Enterprise, E3 or E5, to show you why we think it's a good idea to upgrade.

Windows 10 Enterprise/E3:

Windows 10 E3 includes all the features found within Home and Pro, plus additional security and control capabilities:

- ◆ **User Experience Customisation** – Windows E3 includes advanced user experience customisation controls, this includes the ability to manage the following settings via MDM/Group Policy:
 - **Block Access to the Microsoft Consumer Store/ Disable Access to the Microsoft Store** – end-users can install applications from the Windows Store with standard user privileges on Windows 10 devices. Without proper control, the Microsoft Store applications could increase the risk of data loss across your Windows device estate.
 - **Disable Consumer Experiences** – this prevents applications, such as Candy Crush, from installing on the operating system as end-users log onto the device for the first time.
 - **Start Menu Customisation** – this allows you to customise the Windows Start Menu experience on managed devices.
- ◆ **Advanced Security Features** – Windows E3 includes access to Windows Defender Credential Guard and AppLocker, which can protect against advanced attacks.
- ◆ **Windows Servicing extensions** – Windows E3 Autumn release feature updates are supported for 30 months (vs 18 months on Windows 10 Pro) with quality updates. This has the potential to reduce the operational impact associated with the adoption of Windows 10.
- ◆ **Access to MDOP (only available on certain agreements)** – including access to the Microsoft BitLocker Administration and Monitoring Toolkit, which can securely store BitLocker Recovery Keys on Active Directory Domain joined devices.
- ◆ **Access to LTSC (only available on certain agreements)** – Windows 10 Enterprise LTSC is targeted at 'special purpose devices' that perform a fixed function and require static configuration such as cash machines, manufacturing devices and point of sale devices.
- ◆ **Virtualisation Rights (only available on certain agreements)** – provides the rights required to virtualise Windows 10 to deliver compute, applications and services to end-users.



Windows 10 E5:

Windows 10 E5 includes all the features found in E3, plus Windows Defender Advanced Threat Protection (Defender ATP). Windows Defender ATP is an advanced anti-malware solution that enhances the capabilities of the other Defender security components within Windows. It identifies when anomalous or risky behaviour is occurring on the endpoints in your organisation to allow preventative protection and investigation.



How should I deploy, manage and secure Windows 10?

Windows 10 can be deployed, managed and secured using the same toolsets as previous versions of Windows, however, you may require upgrades and updates to make them Windows 10 compatible. This approach to delivering compute, applications and services is defined as 'Classic IT'. Windows 10 can also be provisioned, managed and secured using a 'Modern IT' approach. Modern IT changes how you deliver and secure corporate applications and data to your end-users. This grants cost-saving and agility benefits above the Classic IT approach. To adopt this Modern IT approach, you may need to invest in additional toolsets, but we can support this transformation and provide you with all the information you need for a smooth transition. For more information see the following blog post - [Modern IT Game Changing](#).





Step 2 Procurement options

Purchasing Windows 10

When it comes to purchasing licenses for Microsoft's modern desktop operating system, **your organisation has unprecedented choice and flexibility.**

The first major decision that you must make is which edition of the product is most suitable for your needs.

Windows Professional offers a business-class OS with features including Windows Hello; Bitlocker encryption; Defender anti-virus and Application Guard. This product is always bought on a perpetual, per-device basis and involves upfront CapEx payment.

Windows Enterprise provides advanced management and security features, including credential guard, start screen control and application control. This product is usually obtained with software assurance (which provides new version rights and virtualisation benefits) and is bought on a perpetual device basis.

Windows **E3** is the most popular edition of the product – this shares the functionality of Enterprise but is purchased as a per-user subscription. It allows each licensed person to install the OS on up to five devices, which tends to suit customers that buy other user-based services such as O365.

Windows **E3** can be obtained on a three-year fixed-price agreement but is most commonly purchased on the CSP agreement. This flexible contract allows customers to be billed monthly in arrears for usage, or to pay for 12 months upfront. Customers that buy on CSP must deploy using modern Azure AD Activation methods.

Finally, Microsoft offer Windows **E5** which includes all the features of **E3** along with Advanced Threat Protection. This is only available on a per-user subscription basis and similarly to **E3**, it can be bought on a three-year contract or on a flexible monthly basis.

Step 3 Application readiness

Your guide to being app ready

Great! You've decided to start your journey to Windows 10, focusing on application readiness! Application readiness is about getting your applications into a 'Windows 10 ready' state. Our recommended approach is broken down into four phases; Discovery, Rationalisation, Prioritisation and Remediation:

Phase 1 Discovery

During this phase we need to understand what applications exist throughout your current estate. To do this, it's important to use the right tools – Excel spreadsheets just won't cut it here! Via a Software Asset Management or Configuration Management toolset, telemetry data from endpoints is fed into a migration toolset. For larger organisations (over 750 users) we recommend Migration Studio for this task, for smaller organisations, Microsoft's Upgrade Analytics is a good tool to use.

Phase 2 Rationalisation

Once the discovery phase has been completed, it's likely that there will be lots of applications listed in your Migration Toolset. At the rationalisation stage, we look at what's actually being used. We take the usage data from your endpoints and remove any applications that are installed and not utilised. Additionally, to clean up the list of applications further, toolsets will also tidy up Operating System components that are discovered during phase 1.

Phase 3 Rationalisation

During the prioritisation phase, the cleaned data from phase 2 is analysed, and the Migration Toolset will show you where you should be focusing your attention in order to take the next step towards Windows 10 migration. For example, the toolset may show that remediating a subset of your applications will allow you to migrate 25% of your user estate to Windows 10. By prioritising the applications, using the data available, the overall costs associated with the migration will be reduced and the quality of the migration will be increased.

Phase 4 Remediation

Once the applications are prioritised, you can then decide what needs to be done to bring your applications into a 'Windows 10 ready' state. For certain applications this may simply require a version upgrade, but other applications may require re-packaging or delivery via app-virtualisation.



Step 4 Infrastructure readiness

Are your systems ready to upgrade?

Okay, so you've begun work on your applications to get them into a '**Windows 10 ready**' state but to successfully deploy, secure and manage Windows 10, you'll need to perform some infrastructure readiness work. Here are some of our general recommendations, to ensure your **efforts are focused on the right areas**:

If you have an on-premises Active Directory:

Windows 10 E3 includes all the features found within Home and Pro, plus additional security and control capabilities:

- ◆ **We recommend** that existing Group Policies (those used to manage previous operating systems) are not targeted at your Windows 10 estate as this will result in suboptimal or broken configuration. Instead, you'll need to build a new Organisational Unit structure for Windows 10 devices, or use WMI filtering to prevent existing policies from applying to Windows 10 devices.
- ◆ **Your Active Directory Group Policy Central Store** needs to be populated with the latest ADMX/ADML templates, as this will allow you to manage the latest components within the Feature Updates. You'll need to repeat this every six months.
- ◆ **Rather than building your Windows 10 group policies from scratch** start with the Microsoft Security Baseline Templates, and iteratively build on top of those. The Security Baseline Templates will enable the latest security features within Windows 10, using broadly-known, widely-tested hardening configurations. New hardening policies are released by Microsoft with each Feature Update to Windows 10 devices.
- ◆ **Implement Azure AD and Azure AD Connect** and configure Azure AD Connect to support Hybrid Azure AD Join for your Windows 10 devices. Hybrid Azure AD Join is required for effective Microsoft Store Management, Conditional Access and Windows 10 Co-Management.
- ◆ **To enable Windows Hello for Business**, the readiness work required will depend on the approach you choose. Your Active Directory Schema will need to be extended to Windows Server 2016, whichever approach you decide on:
 - **Key-Based** You'll need to introduce Windows Server 2016 Active Directory Domain Controllers into your environment, and a PKI needs to be available to issue certificates to Domain Controllers.
 - **Cert-Based** This removes the requirement for Windows Server 2016 Active Directory Domain Controllers, but also requires ADFS 2016 and authentication certificates to be issued to users.

If you don't have an on-premises Active Directory, and are just utilising Azure AD:

- ◆ We recommend your MDM is integrated with Azure AD, and that Azure AD Premium P1 licensing is purchased to support MDM auto-enrolment during the Azure AD Join phase.

For Classic IT managed devices (See the difference between Classic IT and Modern IT here, if you are utilising ConfigMgr:

- ◆ ConfigMgr needs to be updated to the latest version of Current Branch, as this is required to effectively deploy and manage the latest Windows 10 Feature Updates, in addition:
 - ConfigMgr Current Branch requires Software Assurance on the licensing.
 - ConfigMgr Current Branch may require you to upgrade the operating system of your Primary Site Server or the SQL that hosts the ConfigMgr database.
- ◆ If Co-Management is required, to bridge the gap between Classic IT and Modern IT, you'll need to perform some readiness work to enable PKI authentication within ConfigMgr and you'll need an Azure Subscription to manage devices when they are not connected to the internal network.
- ◆ If you use KMS to activate your devices, make sure your KMS Server keys are updated to provide activation for Windows 10 clients.

For Modern IT managed devices:

- ◆ Your MDM needs to be configured appropriately to effectively secure your Windows 10 device estate and be populated with any client applications that need to be deployed to the Windows 10 device estate.
- ◆ Windows Analytics needs to be implemented to provide insights into the overall health of your device estate.

- ◆ Windows Subscription Activation needs to be implemented, if OEM devices need to be upgraded from Pro to Enterprise.

Whatever approach you take to manage Windows 10 devices, it's important that the Microsoft Store for Business is implemented to allow effective management of the Windows 10 Store on Windows 10 devices, and the right licensing is purchased to support it. For more details on the differences between Windows 10 Pro, Enterprise E3 and Enterprise E5 [click here](#).



Step 5 People readiness

Ensure your people are empowered to get the most from the change

You might be ready for Windows 10, but are all your people? Even if your colleagues are using Windows 10 at home, this migration is a **great opportunity to upskill your users** and help them to be more productive using the new operating system.

Some of the **common functions have changed**, and it's important that people are getting the best out of the new system by using these functions confidently.

The two main approaches to providing employees with Windows 10 training are the development and use of self-paced learning guides and videos and providing training which can be scaled by delivering short lessons online using Skype for Business, MS Teams or other web conferencing applications.

The key areas are:

- ◆ Biometric logon using retina or fingerprint
- ◆ Power options to preserve laptop battery life
- ◆ Settings and the new version of control panel
- ◆ Changed start menu, tiles and how to configure them
- ◆ Using the new file explorer to find apps, files and content
- ◆ Effective use of the system tray, task bar and how to pin applications
- ◆ Using multiple desktops effectively
- ◆ Purpose and use of Action Centre and managing notifications for fewer interruptions
- ◆ How to get the best out of Microsoft Edge

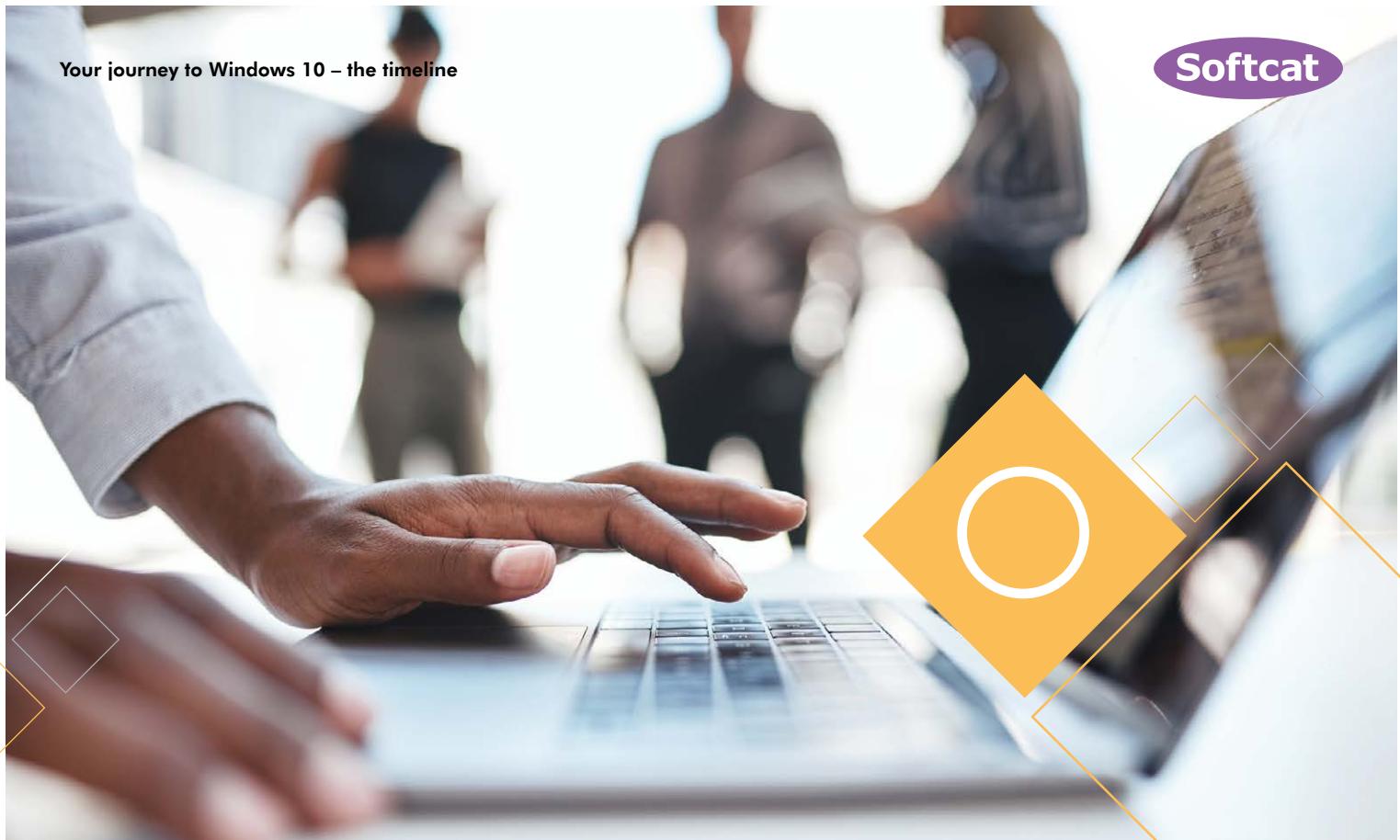
Windows 10 learning approaches

The two main approaches to providing employees with Windows 10 training are the development and use of self-paced learning guides and videos and providing training which can be scaled by delivering short lessons online using Skype for Business, MS Teams or other web conferencing application.

Communications is key to people readiness

Designing imaginative, rich media-based communications really helps to support and promote this change. We think that it's so important to invest time in communicating with your staff in really clear and accessible ways. These could include:

- Getting your key communications experts involved as early as possible by providing them with early access to the Windows 10 environment, making them early adopters, so they can create compelling content
- Designing a wide variety of promotional materials from desk drops and posters to videos, intranet banner ads and content for digital signage
- Writing and testing copy with champions and early adopters
- Devising a comprehensive communications plan covering all available channels and measuring the impact and performance of each channel and its related content



Step 6 Buying devices Are your devices ready?

To ensure your end-users receive an **efficient, seamless experience**, the next step is to make sure your client hardware is fit-for-purpose to support Windows 10 and your organisation's applications and services. **From traditional purchase to the more innovative service solutions**, you need to navigate a wide range of sleek, flexible workplace devices on the market today – **to cater for all your users' methods of working**.

What's Device-as-a-Service?

Device-as-a-Service has taken off in a big way in 2018, across our industry and our customer base. Broadly speaking, the premise is simple:

- ◆ **Outsource the procurement processes and lifecycle management**
- ◆ **Move to an OpEx style of consumption**
- ◆ **Drive more value out of devices by understanding your consumption and utilising intelligence**

Around one quarter of companies are now looking at DaaS to solve various issues with device procurement, management and lifecycle, according to a recent IDC survey. By switching to an OpEx, flexible lease rather than capital purchase, companies get greater stability and visibility of cost for IT consumption. Crucially though, the service options which DaaS provides means organisations are spending less time, money and resources on the day-to-day management of their end-user devices.

How can Device-as-a-Service help with the move to Windows 10?

DaaS has played a big role in the move to Windows 10. With support for Windows 7 ending in January 2020 – many of our customers are facing a hugely costly and complex project to move to a distinctly new OS (in terms of characteristics and management). Device-as-a-Service offers your organisation the ability to mitigate the capEX requirement of HW upgrade, while offering a strategic set of service options to reduce the ongoing management overhead. DaaS is a major element of how we are offering “10 out of 10” support to help your organisation successfully migrate to Windows 10.

The HP DaaS programme offers an intelligence-based service, where all devices are linked to a central BI dashboard which shows:

- ◆ **Device health**
- ◆ **Analytics & reports**
- ◆ **HW/SW inventory**
- ◆ **Utilisation reporting and security status**

This allows you to put both IT and us, the service provider – at the helm of device management and informed decision making to improve end-user experience and efficiency in device resourcing. “Assess, Control, Optimise” – is the dynamic process we go through to review insights and intel on your usage.

Dell’s PC-as-a-Service launched shortly afterwards with a wide-ranging set of ‘menu’ options to add devices to

address the more time-consuming elements of deployment and support. With Dell’s well-established practice of hardware configuration & deployment services (ProDeploy), and options to have a fully managed and flexible deployment (ProDeploy+), PCaaS offers a low-touch implementation service to help customers of all shapes and sizes. Ongoing support of devices, including snappy triage and break/fix (ProSupport), along with options for accidental damage and intelligent automated parts replacement (ProSupport+) complete the picture for BAU device management.

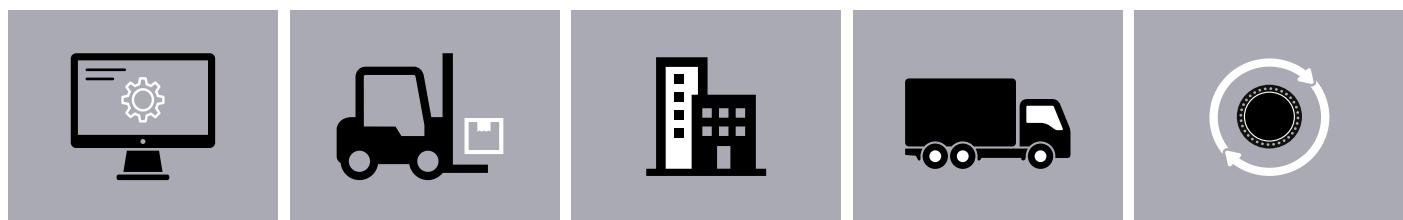
So which vendors are backing this new model of device consumption? Actually, pretty much everybody is joining the party. HP Inc were the first to launch a complete DaaS programme, followed shortly by Dell, but Microsoft, Samsung and Lenovo closely followed suit to offer their own flavours.

Step 7 Windows 10 migration

Don't leave your old devices to landfill

Lifecycle and logistics solutions help organisations with a range of services, from the point of order through to securely recycling old equipment that is no longer right for your needs.

The below services are available at any time and can be packaged up, or provided on an 'a la carte' basis:



Pre-configuration	Logistics	Deployment	Reverse Logistics	Recycling Destruction
Bonded Stock	Dedicated Delivery	Dedicated Engineering	Dedicated Collection	Equipment Audit
Asset Tagging	De-packaging	Security Vetted	Onsite Shredding	Secure Destruction
DOA Testing	GPS Tracked Vehicles	Project Management Team	GPS Tracked Vehicles	Full Certification
Imaging/Personalisation	Flight Case Transit	Process Driven Deployment		Credit or Cash return
	Relocation Services	Floor Walking		WEEE Disposal
	Rentals	Training		

All organisations start in a very similar place, but the support you have is mostly dependent on how much you choose to do in-house and how much you outsource. Windows 10 migrations have many elements from start to finish, but the lifecycle and logistics solution mainly comes into play when you have a finalised Windows 10 image and you have chosen/procured your devices. You can then understand the most secure, sustainable way to finish off the process of the upgrade.

Starting at the beginning, you may not want all your devices to be delivered in a single delivery due to space or resource constraints. To solve this, many organisations, such as Softcat, can store your equipment in a secure warehouse where it is ready for call-off or configuration and deployment.

One option is for the devices to be pre-staged; you may require the device to be asset tagged, as well as configured with windows building in your chosen applications. Using configuration services means that the device will be 'Business Ready' or as close as possible when delivered. The device can be delivered directly to the end user so there is a 'zero touch' delivery, again giving you great efficiency savings.

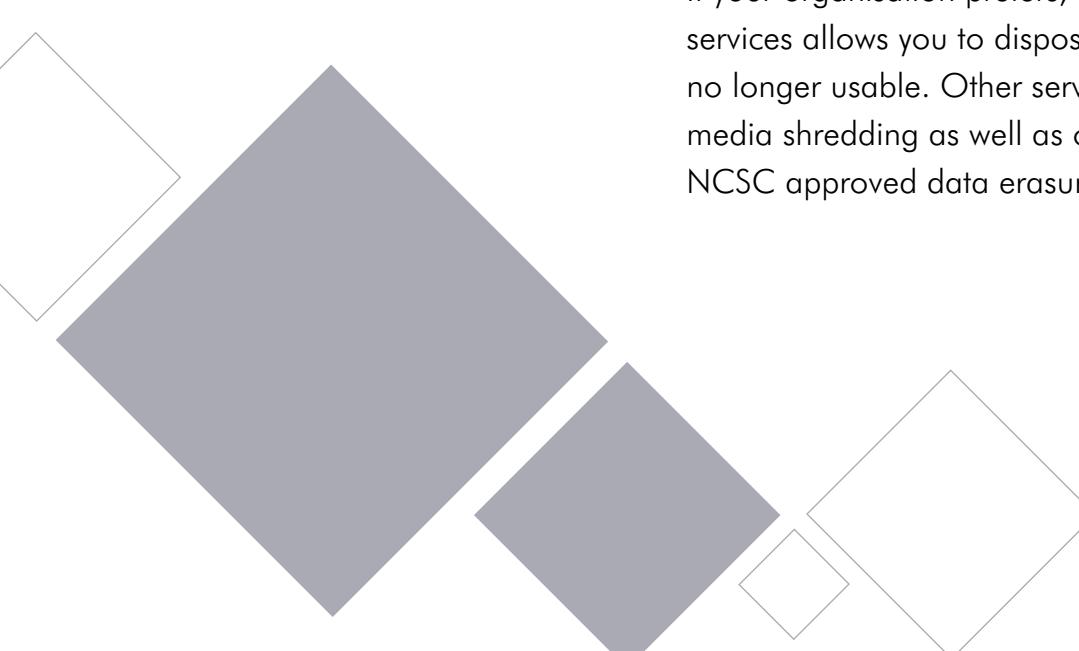
The Softcat configuration centre can configure approximately 400 devices at one time, which allows for using dedicated/non-dedicated VPN connections and co-locations infrastructure so that on-premise processes can be replicated, allowing hardware to be configured fully before deployment.

Once you're ready for your equipment to be deployed, you can utilise security-cleared engineers and locally-based teams to deploy your equipment. Options include security cleared engineers and geographically based teams. To make the operation as efficient as possible, we use proven methods

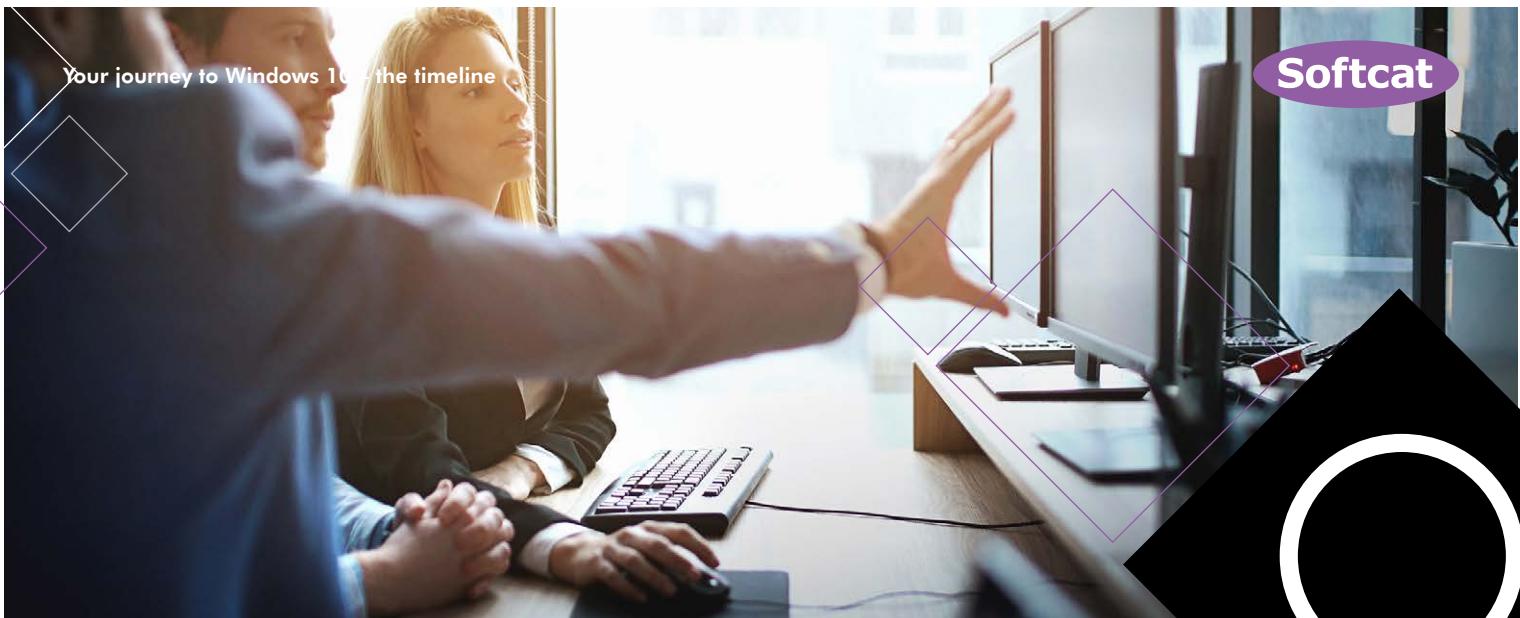
such as 'Single Logistics Action' where engineers will take the equipment to site, install and extract the legacy equipment in one trip. This means there is a reduction in visits to site, positively impacting project costs, and the environment.

To also reduce the number of deliveries required and time spent on site, you can utilise de-packaging services, this means all packaging will be removed and recycled at the configuration centre. Where required you could engage a full range of qualified project management and project co-ordinators to work with you and engineering teams to ensure a successful outcome.

Once you've deployed all the new devices across your business and you want to recognise the value that is left in the old devices, you can utilise logistics, process costs and preferred data destruction to ensure they're securely disposed of, where required.



If your organisation prefers, then secure WEEE disposal services allows you to dispose of equipment securely if it's no longer usable. Other services include onsite and offsite media shredding as well as onsite and offsite CESG/NCSC approved data erasure.



Step 8 Operate and innovate Keep Windows 10 at its best

In the same way we take cars through an MOT, the in-life **management of Windows** is crucial to maintaining the experience promised when it was deployed. Internet connected devices are **exposed to a wide range of rogue software every day**, and it's a company's duty of care to keep its people safe and secure by monitoring threats and mitigating their risks, whilst providing continuous improvements to the Windows experience.

Windows maintenance is important so we recommend an organisation's IT support team should develop a capability to advise and guide their colleagues on how to keep Windows 10 optimised. This can be achieved through a combination of automation and the creation and curation of content on:

- ◆ **How to manage updates and why they're important**
- ◆ **How to delete unnecessary files and programs**
- ◆ **The importance of regular hard disc scans**
- ◆ **The most important settings and why they matter for an optimum experience**
- ◆ **How to keep hardware clean**
- ◆ **Working with files, directories and OneDrive**
- ◆ **Getting the best from Windows search**
- ◆ **Managing notifications to reduce interruptions and distractions**
- ◆ **How to manage laptop battery power**
- ◆ **How to manage privacy and security**
- ◆ **Setting up audio and mobile devices to use with Windows 10**

Innovation using Windows 10 is about creating informative content for employees reminding them of the latest feature updates and why they're useful. Develop a calendar of communications events aligned to Microsoft's feature releases and produce content to support the events. A best practice approach is to plan and execute a digital magazine launch with specific themes for each month or interval that best suits your organisation. Use surveys to understand what people need the most help with and which areas of Windows they want to learn more about. Typical themes include but are not limited to:

Other approaches include creating onsite drop in areas or Windows clinics around a particular theme, staffed by experts providing a high touch service. You can receive support and guidance from your IT supplier on how to develop and curate content as well as communications to support continuous innovation initiatives.

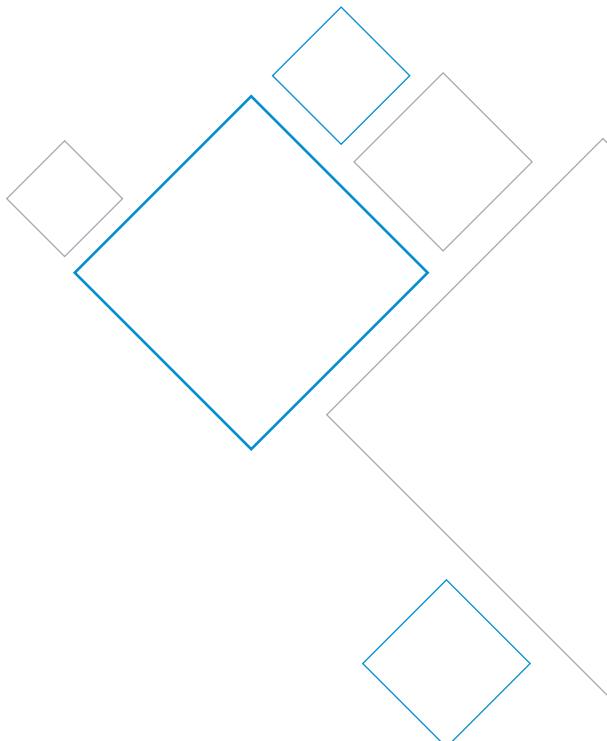
Helpful resources

Have a read:

[Migrate to Windows 10](#)

[Discover Windows 10 devices](#)

[Stay Evergreen with Windows 10](#)



Take a listen:

[What's new with Windows 10](#)

[Windows 10 Migration Readiness](#)

[VDI, User-Profiles and User-Data with Windows 10](#)



Get in touch

info@softcat.com or call us on 01628 403 403