Windows As A Service

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Becoming Agile with Microsoft

- Delivering new value, features and capabilities on a faster cadence
- Deeply integrating cloud services, both to add functionality and to simplify the process of staying current
- Providing unmatched flexibility and control
- Continually improving security, reliability, and performance
- Simplifying deployment and management
Introducing Windows as a Service

A brand new way of building, deploying, and servicing Windows

Building
- Continual, ongoing development
- Deliver new features twice per year
- In the open, to enable and encourage feedback

Deploying
- Stay current with simple, automated update process
- Unmatched application compatibility
- Flexible timelines, methods, tools

Servicing
- Simplified process, to ensure consistency, stability and reliability
- Delivered using cumulative updates
- Eliminate platform fragmentation for all Windows-based devices
Windows as a service: Building Windows

- Daily builds, installed immediately by the engineering teams
- Frequent internal self-host builds (often multiple times per week) for broader feedback
- Insider Preview builds (often weekly) for external validation and feedback
Windows as a service: Deploying Windows

Unmatched flexibility and control, depending on needs

**Windows Insider Preview Branch**
- Specific feature and performance feedback
- Application compatibility validation
- Test machines, small pilots

**Current Branch**
- Deploy to appropriate audiences
- Test and prepare for broad deployment
- Early adopters, initial pilots, IT devices

**Current Branch for Business**
- Information workers
- General population
- Benefits from new features
- Begins broad deployment

**Long Term Servicing Branch**
- Specialized systems
- Deploy for mission critical systems
- No need for frequent new features (or any sort of change)
- Too expensive for general population
Windows as a service: Servicing Windows

With Windows 7 and 8, servicing choices added complexity and cost, increased fragmentation, and reduced quality.
Windows as a service: Servicing Windows

With Windows 10 servicing, consistency and simplicity are paramount

Quality Updates

- A single cumulative update each month
- Security fixes, reliability fixes, bug fixes, etc.
- Supersedes the previous month’s update
- No new features
- Try them out with Security Update Validation Program (SUVP), other

Feature Updates

- Targeting twice per year with new capabilities
- Very reliable, with built-in rollback capabilities
- Simple deployment using in-place upgrade, driven by existing tools
- Try them out with Insider Preview

Changes being considered for older Windows releases as well
Windows as a service: timelines

**Windows Insider Preview Branch**
- Specific feature and performance feedback
- Application compatibility validation

**New Windows 10 Release**
- Deploy to pilot audiences
  - Validate and prepare for broad deployment
- Deploy to all audiences, in waves to reduce risk

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**Evaluate**
- 6+ months of active development

**Pilot**
- ~4 months

**Deploy / Use**
- 12+ months
  - 16+ months to validate, deploy, and use each release

**Grace**
- 60 days

The process repeats...
How to do Windows as a service, preparing our commercial customers
What needs to change

Traditional deployment (every 3-5 years)

Windows as a service (twice per year)
Configure Insider PCs
• Lab or secondary PCs
• Enough to explore new features, measure compatibility

Identify special PCs
• Deploy Windows 10 Enterprise LTSB
• Limited numbers (we hope)

Recruit volunteers for pilots
• Willing participants who will provide feedback
• Cover the broadest set of apps and devices possible

Divide broad population of PCs
• Standard deployment best practice
• Focus on risk reduction, minimizing disruption
Each Windows 10 release has its own lifecycle
Starts as Current Branch, progresses to Current Branch for Business

Each device can specify a preference for when to move forward to the next release
Defer for CBB

Each deployment or management tool can implement this idea differently
# Understand the differences

<table>
<thead>
<tr>
<th>Capabilities</th>
<th>Current Branch for Business (CBB)</th>
<th>Long Term Servicing Branch (LTSB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Enterprise use scenario</td>
<td>General information worker systems; salesforce, etc.</td>
<td>Special systems: Air Traffic Control; Hospital ER, etc.</td>
</tr>
<tr>
<td>Value of the latest features as they are released</td>
<td><img src="%E2%9C%85" alt="checkmark" /></td>
<td></td>
</tr>
<tr>
<td>Several months to consume feature updates</td>
<td><img src="%E2%9C%85" alt="checkmark" /></td>
<td></td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; party browsing choices</td>
<td><img src="%E2%9C%85" alt="checkmark" /></td>
<td>IE 11</td>
</tr>
<tr>
<td>Support for Universal Office and some 1&lt;sup&gt;st&lt;/sup&gt; party Universal apps</td>
<td><img src="%E2%9C%85" alt="checkmark" /></td>
<td></td>
</tr>
<tr>
<td>Ability to load universal apps</td>
<td><img src="%E2%9C%85" alt="checkmark" /></td>
<td><img src="%E2%9C%85" alt="checkmark" /></td>
</tr>
<tr>
<td>Support for Win 32 Office</td>
<td><img src="%E2%9C%85" alt="checkmark" /></td>
<td><img src="%E2%9C%85" alt="checkmark" /></td>
</tr>
<tr>
<td>Ongoing security updates for the lifetime of the branch</td>
<td><img src="%E2%9C%85" alt="checkmark" /></td>
<td><img src="%E2%9C%85" alt="checkmark" /></td>
</tr>
<tr>
<td>No feature upgrade required to stay supported</td>
<td><img src="%E2%9C%85" alt="checkmark" /></td>
<td><img src="%E2%9C%85" alt="checkmark" /></td>
</tr>
</tbody>
</table>

Microsoft Edge, IE 11

IE 11
Understand the differences with Windows 10 LTSB

Microsoft Windows 10 Enterprise
(Current Branch, Current Branch for Business)

Microsoft Windows 10 Enterprise 2015 LTSB
## Compatibility in Windows 10

Outstanding compatibility means a smooth migration from Windows 7 or Windows 8.1

<table>
<thead>
<tr>
<th>Desktop apps</th>
<th>Web sites</th>
<th>Modern apps</th>
<th>Hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizations are observing compatibility rates above 99%</td>
<td>Internet Explorer 11 included (unchanged) for backwards compatibility</td>
<td>High compatibility achieved through:</td>
<td>Windows 10 supports all devices capable of running Windows 7 and above</td>
</tr>
<tr>
<td>High compatibility achieved through:</td>
<td>New Microsoft Edge browser for modern HTML5-based web sites</td>
<td>• Validation of Windows Store apps</td>
<td>Identical hardware minimum requirements as Windows 7</td>
</tr>
<tr>
<td>• Minimal changes to Win32 APIs</td>
<td>Enterprise Mode features to ensure proper use</td>
<td>• Insider feedback during development</td>
<td>Strong driver compatibility, with updates delivered as needed through Windows Update</td>
</tr>
<tr>
<td>• Insider feedback during development</td>
<td></td>
<td>• Telemetry</td>
<td></td>
</tr>
</tbody>
</table>
How did we get to 270M on consumer?

- Analyze the machine as a whole
- Early detection of issues with flighting
- Aggressive approach to removing upgrade blocking apps and drivers after evaluating user experience
- Data driven approach on the long tail of apps
- Targeting of upgrades starting with the most ‘healthy’ machines
How the consumer approach applies to commercial?

Similarities

- Enterprises benefit from a highly compatible OS
- Enterprises can use in-place upgrade
- Data driven approach for machine upgrade readiness evaluation
- Enterprises can benefit from flighting and consumer telemetry

Differences

- Limited enterprise telemetry available
- Some apps needs to be supported by ISV and / or verified in house
- IT can create custom mitigations to make experience seamless
- Web app compat is a concern
Software Compatibility in Windows 10

Get links to Windows 10 ISV support statements

http://www.readyfor10.com

We are actively engaged with ISVs, to ensure full support for Windows as a service.
How to validate applications

Create and maintain an app portfolio
- Complete list of apps and web pages used throughout the organization
- Business and IT experts identified
- IT works with the business to eliminate duplicates, define supported versions

Prioritize, identifying critical apps
- Business critical
- Managed
- Supported
- Unsupported
- Blocked

Validate business-critical apps
- Structured testing, using predefined test plans executed with business and IT experts
- Automated if possible
- Target small percentage of apps

Leverage pilots for broader validation
- IT pilot, to gauge infrastructure, environment, and business productivity app readiness
- Business pilot, targeting the broadest set of applications possible
- Broad deployment using rings, to minimize risk
Call to action

• Understand that Windows as a service requires some changes
• Be an insider
• Get all your drivers up on WU
• Be able to position CB, CBB and LTSB
• Implement a Windows 10 servicing process