

# Windows Fundamentals Performance & Power

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# Assessment Toolkit Overview

## Performance assessments

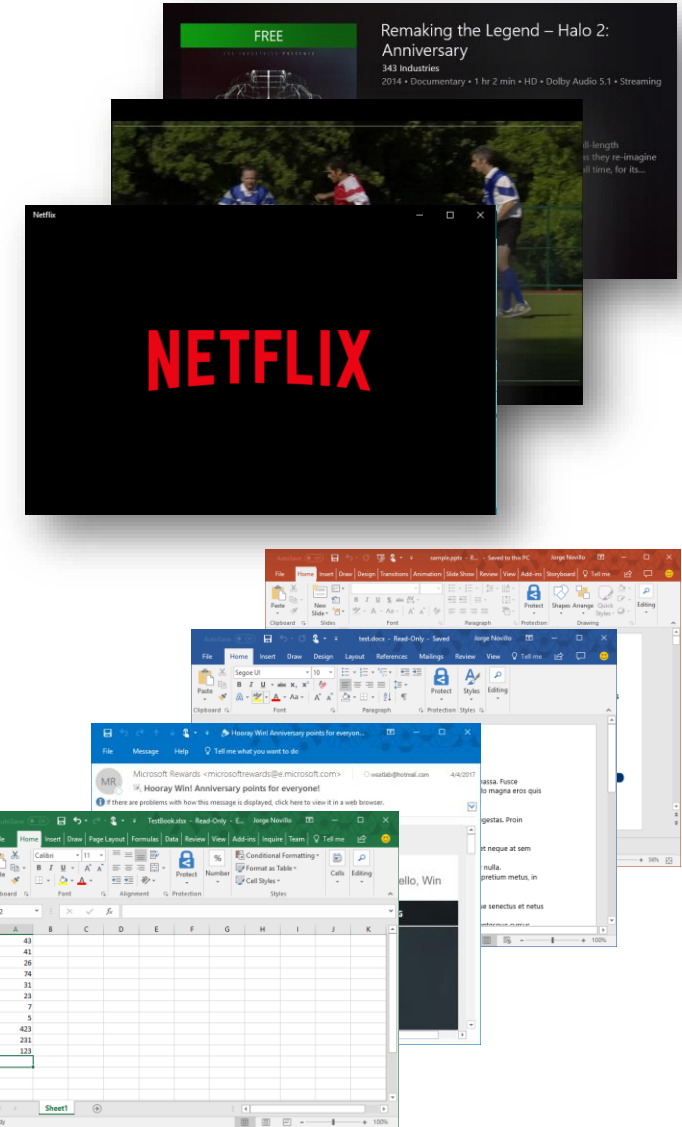
Automated performance and quality assessments simulate real world scenarios while capturing metrics & actionable traces

- App Launch
- Startup & shutdown latency
- Memory footprint
- Media Quality

## Battery life workloads

Assess devices from an energy efficiency point of view while capturing metrics & actionable traces

- Office productivity
- Local and streaming full screen video playback
- Modern standby



# Download & Install Assessment Toolkit

## ADK Download

Preview Build: <https://aka.ms/ADK-Preview>

RTM Build: <https://aka.ms/ADK-RTM>

### Install Windows ADK Insider Preview

Download Windows Assessment and Deployment Kit (Windows ADK) Insider Preview to get the new and improved deployment tools used to automate a large-scale deployment. Windows ADK Insider Preview includes:

- The Windows Assessment Toolkit and the Windows Performance Toolkit to assess the quality and performance of systems or components.
- Several deployment tools such as WinPE, Windows Imaging and Configuration Designer (Windows ICD), and other tools to customize and deploy Windows 10 images.

**Windows ADK Insider Preview - Build 17110**

## Features to install

Windows Performance Toolkit

Windows Assessment Toolkit

Media eXperience Analyzer

### Select the features you want to install

Click a feature name for more information.

- Application Compatibility Tools
- Deployment Tools
- Windows Preinstallation Environment (Windows PE)
- Imaging And Configuration Designer (ICD)
- Configuration Designer
- User State Migration Tool (USMT)
- Volume Activation Management Tool (VAMT)
- Windows Performance Toolkit
- Windows Assessment Toolkit
- Microsoft User Experience Virtualization (UE-V) Template
- Microsoft Application Virtualization (App-V) Sequencer
- Microsoft Application Virtualization (App-V) Auto Sequer
- Media eXperience Analyzer

# Windows 10 April 2018 Update

# General Toolkit Updates

## Native ARM64 support

Improved support for ARM64 execution

## Battery life testing infrastructure

Removed system timer resolution metric from reports

Disabled default execution of Maintenance Tasks before running the workload

## PowerView utility

New tool to visualize the Energy Estimation Engine (E3) logs

E3 logs produced by "PowerCfg /SRUMUTIL" command

Tool location: C:\Program Files (x86)\Windows Kits\10\Assessment and Deployment Kit\Windows Assessment Toolkit\x86\powerview.exe

Sample E3 log location: "C:\Users\%USERNAME%\Documents\Assessment Results\JobResults\_DESKTOP-RGF1F85\_2018-0319\_1526-12.086\000\_EnergyEfficiency\results\E3-SRUMUTIL-CSVLog.csv"

# Battery Life Workload Updates

## Productivity

New battery life workload to evaluate power during Microsoft Office apps interactions.

Prerequisite: Install Microsoft Office 2016

## Media Playback

Deprecated Groove streaming audio scenario

Added YouTube streaming in Edge scenario

Fix to avoid Films & TV user consent pop-up on first launch

## Modern Standby

Disables adaptive hibernate triggers

## Legacy Standby & Hibernate

New assessments to measure battery life in S3 and S4

# New Performance Assessments (1/2)

## Modern Standby Performance

New performance assessment to evaluate Modern Standby resume latency:

- Simulated batteries
- Execution on AC and DC
- Disconnected standby
- Additional diagnostics

New metric targets (as defined in ModernStandbyPerf.json), aligned with HLK:

- Exit latency  $\leq 1$  second
- SW DRIPS  $\geq 80\%$
- HW/SW DRIPS delta  $\leq 10\%$

# New Performance Assessments (2/2)

## Microsoft Office Performance

New assessment unlisted in the Windows Assessment Console

Interacts with Excel, Word, PowerPoint

Metrics: app launch, file open, and slide show launch times

## Register assessment using RegAsmt.exe

```
"C:\Program Files (x86)\Windows Kits\10\Assessment and Deployment Kit\Windows Assessment Toolkit\x86\regasmt.exe" "C:\Program Files (x86)\Windows Kits\10\Assessment and Deployment Kit\Windows Assessment Toolkit\Productivity Assessment\OfficeUXPerf.asmtx"
```



# Performance Assessment Updates

## Edge Security Software Impact

Updated JS.js script to avoid a non user representative corner cased used by the assessment

Fixed failure when user name has a space in it

Updated regions XML file for new Edge instrumentation

## Media playback quality

Deprecated Groove streaming audio scenario

Gathers two iterations (Timing and Analysis), metrics are extracted from the timing ETL file

## Microsoft Store Performance Assessment

Formerly named "Windows Store Performance Assessment"

Now allows to test all preloaded apps (no filter string required).

"Enter Microsoft Store app name" filter field now accepts multiple keywords separated by ";"

Blocklist text file to specify list of apps to skip when testing entire preload.

Fixed "Access denied" issues



[Contact us](#) with your questions and comments.