# General Requirements:

All tests depend on WTT to prepare the environment, Mash for Logging, and RPF for UI manipulation. Consult their documentation directly if needed.

The tests should run on Vista SP1, x86 and x64; in English, German, and Japanese. Pseudo-loc is tested, but has known false failures. Bi-di languages were tried once successfully, but are not yet guaranteed.

When determining the SKU, a test is only be valid for ‘Starter’ ‘Home Basic’, ‘Home Premium’ ‘Business’ ‘Enterprise’ and ‘Ultimate’.

A map of SKU names is in SKUNames.xlsx, since they can change depending on what tool you are using

While the test code may refer to ‘N’ skus, the results are undefined and untested.

The tests expect the machine to have a local administrative user logged in, and the machine to not be domain joined.

## Each job in WTT:

1. Always copies the Mash .swt, the tests .dll, and usually the .pdb to the test machine.
2. Often installs the LUA auto-elevation service.
3. Occasionally will copy/install other items.
4. Runs a single Mash suite file.
5. Removes the auto-elevate service if it was installed.

## The WTT jobs currently depend on these jobs:

### Triggered by constraints:

WindowsShell-RPF-LH, provided by Job ID 6764 – Required

WindowsShell-Mash\_II-Harness-LH, provided by Job ID 16 – Required

WindowsShell-Logging-LH, provided by Job ID 12 – Required by Mash

WindowsShell-ShTestEX-LH, provided by Job ID 18 – Required by Mash

WindowsShell-TestFileProducer-LH, provided by Job ID 20 – Required by ShTestEX, which is Required by Mash

## Generally, each test .dll:

1. Calls a common init function that configures RPF and logging.
2. Cleans the desktop of potentially interfering windows.
3. May check the machine for baseline requirements for the specific test.
4. Determines the current SKU, and the Expected feature set.
5. Determines the appearance of the UI for the feature set.
6. Compares the expectation with the appearance, and reports the result.
7. Cleans the desktop of windows it may have opened.
8. Calls a common uninit function that closes the log, and terminates RPF.

# Test specific notes:

## AdvancedPhoto:

AdvancedPhotoThemes

Will detect and fail if the machine scores less than 3.0 for 3d graphics capability.

Checks if ‘Themes’ are selectable in the Photos screen saver.

## Backup:

Checks for availability of Backup and Restore center features.

Requires elevation.

BackupEntryPointAccessories()

BackupEntryPointMaintenance()

BackupEntryPointFirstAndSecondConfig()

Will detect if a backup was previously configured, and select the right code path

## Bitlocker:

BitLocker\_BVT\_EntryPoints()

Checks if the Bitlocker control panel is available.

## Branding:

Branding tests compare the displayed branding strings to both the extracted resources and hardcoded constants, this will fail on Pseudo-Loc.

BrandingWC\_BVT\_EntryPoints()

BrandingSysDM\_BVT\_EntryPoints()

Compares bitmap image resources that constitute the Logon Screen Logo and validates the logo bitmap resource that loaded when Vista was installed against a cached bitmap resource. This portion of Branding\_BVT requires that the cache folder Logon\_Logo\_Cache be copied to all target test machines in Mash\_II’s subdirectory in the form of a WTT job that copies [WTT\TESTBINROOT]\NTTEST\ShellTest\testareas\skutest\Logon\_Logo\_Cache to [WindowsShell\BaseDir]\mash\_ii\Logon\_Logo\_Cache recursively.

VerifyLogonBranding\_BVTEntryPoint()

## ClientSideCaching

VerifyClientSideCaching()

Checks if ‘Always Available offline…’ is available on a network share.

Needs access to a Boundary Machine to test the feature.

Textfiles are used to store Sharename, Path to the share and Username and password that can access the share.

Depends on ShellTestEX functions

BufferFile():

Reads from a textfile.

## CPUSockets:

VerifyCpuSocketsUsage()

Can only check if the number of CPU sockets in use exceeds the license limit.

Can only fail if physical hardware exceeds limit, only useful on multi-socket machines.

Test is insufficiently tested due to lack of capable hardware.

## DomainJoin:

DomainJoinEntryPoints()

Checks if Domain Join UI is available.

Requires Elevation

Will log an error if the “Computer Name” tab is inconsistently localized, such as on Pseudo-loc.

Unknown behavior if test machine is already joined to a domain.

## DVDMaker:

VerifyDVDMaker\_StartMenuEntryPoint()

Checks if DVD maker exists on the Start menu.

## DWM:

Does not currently check for desktop graphics level, test may log a fail if run on an insufficient system.

VerifyDWM\_GlassEntryPoint()

Checks if Glass effect is selectable.

VerifyDWM\_AeroEntryPoint()

Checks if Aero UI theme is selectable.

## Fax and Scan:

VerifyFaxAndScan\_StartMenuEntryPoint()

Checks if “Windows Fax and Scan” is on the Start menu.

## FileEncryption:

VerifyEncryption()

Checks if the option to encrypt files and folders is available

Depends on ShellTestEX functions

## FUS:

VerifyFUS\_StartMenuEntryPoint()

Checks if “Switch User” is available from the Start menu.

## Games:

Requires Elevation

Only checks a subset of the Default and Premium games.

Custom resource extraction for game names in Game Explorer.

Does open each game it checks.

VerifyGames\_PremiumGamesEntryPoint()

Chess and Mahjong are checked for Premium.

VerifyGames\_DefaultInstalledGamesEntryPoint()

FreeCell and Hearts are checked for Default.

## Group Policy:

GroupPolicy\_BVT\_EntryPoints()

Custom resource extraction for .MSC files

## HDPublish

HDPublishSelection()

Checks if HD Codecs are available for Encoding in Movie Maker.

NTSC/PAL compatible

Hardcoded to use ‘Bear’ sample video

Has to go deep into Movie Maker UI, will break if UI changes.

Enumerates the Codecs found, but only tests for non zero total.

## InternetConnectionSharing

Requires Elevation

Depends on devcon.exe from [OSBinRoot]\idw\devcon.exe, Might not be available on upgrade scenarios.

Machine must not be domain joined.

ICSViewStatusEntryPoint()

Network Sharing UI

ICSManageNetworkConnectionsEntryPoint()

Network Connections UI

## LocalFileTimewrap

VerifyLocalFileTimewarp():

Checks if Timewarp feature is available on a Local file.

Depends on ShellTestEX functions

Also depends on the files being on the first partition (C:)

## MakeDVDMovie:

VerifyMakeDVDMovie

Checks Photo viewer for the option to make a DVD.

Will false fail if WEI graphics score is too low.

Job does not depend on a DVD burner being present.

## MCE:

MCE\_BVT\_EntryPoints()

Checks if “Windows Media Center” is listed on the Start menu.

“Windows Media Center” is never localized.

## MediaSample:

VerifyMediaSampleFiles()

Currently depends on the files being on the first partition (C:)

## Meeting Space:

Requires Elevation

VerifyCreatingNewMeeting():

Checks if Meeting Space is available and verifies if one can start a new meeting.

## Mobility Center:

MobilityCenterEntryPoints()

Checks if Mobility Center is available.

Requires running on a PC recognized as Mobile.

Test is insufficiently tested due to lack of capable hardware.

## MUI:

MUI\_BVT\_EntryPoints

Checks if Multilanguage User Interface is available.

Only available on English base.

## Network Projection:

NetworkProjection\_BVT\_EntryPoints()

Checks if “Connect to a Network Projector” is available

Opens the program, then closes it.

Does not use a Network Projector/Emulator.

## NetworkShareTimewrap:

VerifyNetworkShareTimewarp():

Checks if “Restore previous version” is available on a network share.

Needs access to a Boundary Machine to test the feature.

Textfiles are used to store Sharename, Path to the share and Username and password that can access the share.

Depends on ShellTestEX functions

BufferFile():

Reads from a textfile.

## Parental Controls:

Excluded if machine is Domain joined.

Requires Elevation

VerifyParentalControlsCplHomeViewEntryPoint()

Checks Home View of Control Panel for Parental Controls availability.

VerifyParentalControlsCplClassicViewEntryPoint()

Checks Control Panel for Parental Controls availability.

VerifyParentalControlsGamesExplorerEntryPoint()

Checks Games Explorer for Parental Controls availability.

VerifyParentalControlsInternetExplorerEntryPoint()

Check IE for Games Parental Controls availability.

## PhotoScreenSaverSettings:

PhotoScreenSaverSettingsScopeandRating()

Checks Photos screen saver for gallery and ratings scope capability.

Will detect and fail if the machine scores less than 3.0 for 3d graphics capability.

## RAM:

VerifyRAM\_ControlPanelEntryPoint()

Checks if current system RAM, as displayed in the System CPL exceeds license limit.

No available test machines exceed the lowest limit.

Test may be unavailable through UI on SP1, see DCR# 2009730 in Windows OS Bugs

## Remote Desktop:

RemoteDesktop\_BVT\_EntryPoints()

Checks if the Remote Desktop enabled version of the Remote tab of System Properties appears.

Will log an error if Localized versions of “Remote” tab are inconsistent, such as on Pseudo-Loc

## SideShow:

SideShow\_BVT\_EntryPoints()

Checks if the SideShow control panel item appears.

Does not use Aux. Display emulator.

## TimeWarp:

Timewarp\_EntryPoint()

Checks if the “Restore Previous Versions” tab appears.

Finds a hard drive on the local machine, and checks the properties.

Uses a custom resKey, for the drive letter + drive label string.

## StartMenuClassic:

VerifyStartMenuClassic\_EntryPoint()

Checks the ‘Classic’ mode of the Start menu for the correct items.

## WAU:

Stub code, incomplete, excluded by ‘dirs’ file

## Welcome Center:

Checks each expected item in the Welcome Center.

Does not usually check for alternate item names resulting from inconsistent localization.

Does not check for anything other than SKU to set expectations.

WelcomeCenter\_Comp\_Details\_EntryPoint()

WelcomeCenter\_Add\_User\_EntryPoint()

WelcomeCenter\_Easy\_Transfer\_EntryPoint()

WelcomeCenter\_Connect\_Internet\_EntryPoint()

WelcomeCenter\_Ultimate\_Extras\_EntryPoint()

WelcomeCenter\_Whats\_New\_EntryPoint()

WelcomeCenter\_Personalize\_EntryPoint()

WelcomeCenter\_Register\_Windows\_EntryPoint()

WelcomeCenter\_Add\_Printer\_EntryPoint()

WelcomeCenter\_MCE\_EntryPoint()

WelcomeCenter\_Demos\_EntryPoint()

WelcomeCenter\_Basics\_EntryPoint()

WelcomeCenter\_Ease\_Access\_EntryPoint()

WelcomeCenter\_Backup\_Restore\_EntryPoint()

WelcomeCenter\_Control\_Panel\_EntryPoint()

WelcomeCenter\_Anytime\_Upgrade\_EntryPoint()

## WindowsMediaConnect

VerifyWindowsMediaConnect():

Checks for media sharing option in Windows Media Player.

Uses two registry keys to turn On and Off ‘Classic Menu’ in Windows Media Player

wmpmenuOff.reg and wmpmenuOff.reg

## WMP and MM:

VerifyWmp\_StartMenuEntryPoint()

Checks if “Windows Media Player” is on the Start menu.

VerifyMm\_StartMenuEntryPoint()

Checks if “Movie Maker” is on the Start menu.