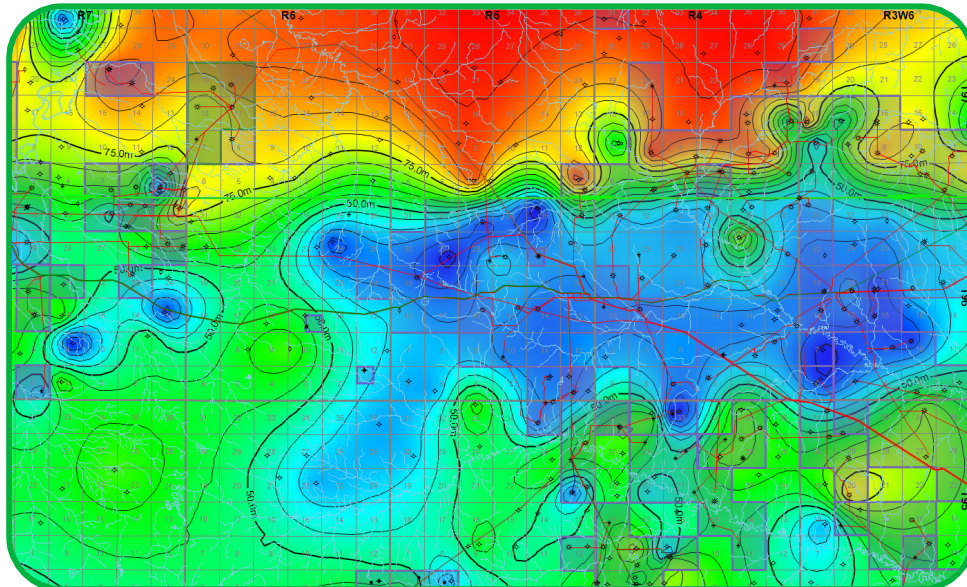




IHS Markit™

AccuMap & AccuLogs IT Environment Best Practices

Preparing IT environments for AccuMap & AccuLogs



Preface

This document has been written for an audience with an intermediate understanding of Microsoft Windows based computer operating systems, networks, and anti-virus/antimalware software. It is assumed that said audience will have administrative rights and permissions to these areas.

It does not assume that the reader has any knowledge of how to use AccuMap and/or AccuLogs.

Detailed in the following pages are the steps involved to best prepare an IT environment for the implementation and use of AccuMap, AccuLogs, and the AccuMap License Manager Service.

Please note that failing to follow the guidelines provided in this document can lead to performance issues for end users.

Contents

Preface.....	2
Introduction.....	6
AccuMap.....	6
AccuLogs.....	6
System Requirements.....	7
Client Workstation Requirements.....	7
Recommended.....	7
Preferred.....	7
Minimum.....	8
Server Requirements.....	9
Recommended.....	9
Cloud Based Solutions.....	10
Software Requirements.....	10
Network/LAN.....	10
End of Life Information.....	10
Windows XP.....	10
Windows Server 2003/R2.....	10
Anti-Virus / Antimalware.....	12
Exclusions.....	12
Files.....	12
File Types/Extensions.....	13
Executables/Processes.....	13
Microsoft Exclusions.....	13
Other Exclusions.....	14
Platform Notes.....	15
BitDefender.....	15
ESET.....	15
LANDesk.....	15
Microsoft SystemCenter2012 / Endpoint / Security Essentials /Antimalware.....	16
Symantec Endpoint Protection.....	16
Symantec Scan Engine.....	17
Trend Micro Office Scan.....	17
System Configuration.....	18

Permission Requirements.....	18
Shared Folder.....	18
User Top Files	18
Windows Firewall.....	18
Other Local Firewall.....	18
Offline Files	19
Disable Via GPO	19
Disable Locally	19
Sharing Wizard.....	20
Disable Locally	20
Printer Configurations.....	22
General Printer/Plotter Settings	22
Printer/Plotter Driver Types	23
PS or PostScript Drivers.....	23
PCL Drivers	23
HPGL2 Drivers (HP Plotters)	23
PDF Writers.....	24
AccuMap Downloader.....	25
Downloader Features.....	25
Checksum Verification	25
Pause & Resume	25
Details & Logging	25
Scheduling.....	25
VPN-less & Portable.....	25
Configuration Notes.....	26
Other Notes	27
Wait Chain Issues & Halts.....	27
4K/Hi-DPI Monitors.....	27
Hyper-V.....	27
Software Conflicts/Issues.....	28
Adobe Acrobat/Reader – Protected Mode.....	28
Citrix Virtual Desktop Agent Core Services (Version 5.6.400.16)	28
Citrix Universal Print Driver & CutePDF/PDF Creator/Foxit PDF.....	29
Microsoft GDI+ Errors	29

Surfer (Versions 7, 8, & 9) 30

Introduction

AccuMap

AccuMap is an oil and gas mapping, data management and analysis software which consist of a series of databases containing information on subsurface land, well, pressure, production, pipeline, core, reserve, seismic, and logs for the Western Canadian Sedimentary Basin and Frontier areas.

AccuMap databases and program files are typically installed on an application server whereby clients run workstation set-ups to access the information through a front-end interface. Updates to the databases occur twice a month while updates to the program files generally occur monthly. There are also two separate data versions of AccuMap, IPL and ACD. The main difference between them is the codes which are used to represent the various formations.

Access to these databases (modules) is controlled by the AccuMap License Manager Service – a Windows service which keeps a constant track of the modules in use and which either grants or denies access to them based on the number of seats contained in the AccuMap License File. Failure to have the service installed and running will prevent a successful start-up of AccuMap.

AccuLogs

AccuLogs is a software program that must be run within AccuMap but which primarily interacts with and provides data from the IHS Information Hub – an online repository of data which contains millions of depth registered raster well log images and digital LAS files. As with AccuMap, there are two different data versions of AccuLogs, IPL and ACD. The version chosen during installation should match the version chosen for AccuMap.

AccuLogs program files are typically installed on the same server as AccuMap and like AccuMap; AccuLogs also requires that a workstation set-up be done. Licensing for AccuLogs is granted and maintained by both the AccuMap License Manager Service, the AccuMap License File, and through an external database maintained by the IHS Licensing Department. In addition, for AccuLogs to connect to the IHS Information Hub, a secure network connection to IHS servers must be in place. Information on acquiring this connection is beyond the scope of this document as it is handled independently by the IHS Connections Department.

System Requirements

AccuMap & AccuLogs support either local installation (standalone) or a standard client-server installation in a “parallel” version configuration.

The following system specifications are not intended as an endorsement of specific brands, hardware, or software manufacturers; individual deployments will have results dependent on a variety of factors (i.e. video card chipset & drivers, internal network conditions, type of application deployment, etc.)

Client Workstation Requirements

AccuMap & AccuLogs will function when using hardware that meets the minimum hardware/software requirements; however, the performance may not meet end user expectations.

Recommended

IHS recommends a system matching or better than the following specifications for general users of AccuMap.

CPU: Intel Quad Core i5 2.90 GHz (or AMD Equivalent) or better

RAM: 8GB

Storage: 1GB of free disk space (Networked Client) or 18GB of free disk space (Standalone Install)

Operating System: Windows 7/8/10 (64bit)

Network: 1Gbps Network Connection

Graphics/Video Display Card: Capable of screen resolutions of 1024x768 or higher

Printer: Any Windows-compatible printer or plotter

Preferred

This is suggested for power users and geologists that will usually operate with multiple programs and map files open at the same time.

CPU: Quad Core i7 3.50 GHz (or AMD Equivalent) or better

RAM: 16GB or more

Storage: 1GB of free disk space (Networked Client) or 18GB of free Solid State Disk space (Standalone Install)

Operating System: Windows 7/8/10 (64bit)

Network: 1Gbps Network Connection

Graphics/Video Display Card: Capable of screen resolutions of 1024x768 or higher

Printer: Any Windows-compatible printer or plotter

Minimum

While AccuMap will operate at this application performance will suffer and user experience is likely to be poor. Multitasking between different applications or working on more than a single map at once can result slow redraws, printing issues, and delayed workflows.

CPU: 2.6 GHz Intel Core2 Duo (or AMD Equivalent) multicore processor

RAM: 4GB

Storage: 1GB of free disk space (Network Client) 18GB of free disk space (Standalone Client)

Operating System: Windows 7 32bit

Network: 100Mbps Network Connection

Graphics/Video Display Card: Capable of screen resolutions of 1024x768 or higher

Printer: Any Windows-compatible printer or plotter

Server Requirements

Many factors such as the total number of users, other applications running on the same server, etc. will have a varying effect on server performance in different environments.

Regarding AccuMap performance on the server side there are two areas that will play the largest part in ensuring that the application operates at its best for either virtual or dedicated server install types.

- Network Speed – The connection from the server to the end user should be as good as possible. 1Gb network connections from the workstation will ensure that the large amount of read actions AccuMap performs are dealt with quickly.
- Disk Speed – The storage array or disks that the AccuMap install is located on should be running at 7200rpms or better to allow for improved I/O. In most cases data arrays are operating at 10000 RPMs or faster so this most likely isn't a big concern. The best possible choice would be to host the install on an SSD array.

Recommended

The recommended specifications are based on the Windows Server 2008R2 recommended system requirements and are provided as a suggestion.

CPU: Intel Xeon 2 GHz (or AMD Equivalent) or better

RAM: 8GB or more

Storage: 60GB of free disk space or more

Operating System: Windows Server 2008R2¹, Windows Server 2012(R2), Windows Server 2016

Network: 1Gbps Network Connection or faster

Graphics/Video Display Card: N/A

¹ Windows Server 2008 is no longer supported due to lacking .Net compatibility. Windows Server 2008R2 and newer are all supported.

Cloud Based Solutions

AccuMap is not officially supported when run from cloud based server solutions. For more information please contact IHS.

Software Requirements

Required software that needs to be installed on end user machines prior to installing AccuMap

- .Net Framework 3.5
- .Net Framework 4.0
- .Net Framework 4.5
- .Net Framework 4.6.1²
- Microsoft Visual C++ 2010 Redistributable³
- Microsoft Visual C++ 2013 Redistributable⁴
- Microsoft XPS Document Writer
- Microsoft Office 2007 (or newer)
- Adobe Acrobat Reader (8 or higher)⁵
- Golden Software Surfer v10 (or newer)⁶

Network/LAN

For best results your LAN should be running at 100/1000 (1Gbps) speeds; however, the software will operate at 10/100 (100Mbps) at the expense of application performance.

End of Life Information

Windows XP

In response to Microsoft's decision to bring Windows XP to end of life on April 8th 2014, IHS will discontinue support for AccuMap & AccuLogs running on Windows XP machines as of December 31, 2014.

IHS will continue to support AccuMap & AccuLogs running on Vista, Windows 7, Windows 8(8.1), and Windows 10.

Windows Server 2003/R2

Currently Microsoft has a set end of life date for all versions of Windows Server 2003/R2 for July 14th, 2015.

<https://support.microsoft.com/en-us/lifecycle/search/default.aspx?alpha=Windows%20Server%202003%20R2&wa=wsignin1.0>

IHS will discontinue support for AccuMap & AccuLogs running on Windows Server 2003/R2 as of July 14th, 2015.

² Required as of October 2016. Please note that Windows Server 2008 is no longer supported by Microsoft for .net upgrades.

³ Both the 32bit & 64bit installs should be applied to end user work stations.

⁴ As of October 2015, AccuLogs will require the Microsoft Visual C++2013 Redistributables installed on every desktop that will be upgraded to AccuLogs 8.3. Both the 32bit & 64bit installs should be applied to end user work stations.

⁵ Only required if end users require PDF capabilities.

⁶ Only required if end users are performing contouring tasks through AccuMap

While Servers running both 2003 and 2003R2 will continue to work as file servers to install AccuMap and AccuLogs on, operating the application or installing from the server level will no longer be supported. This is due to the lack of .Net support on this server platform from Microsoft.

In order to continue using 2003/2003R2 install, server administrators will need to run any application updates or management tools for AccuMap and AccuLogs from a workstation machine.

IHS will continue to support AccuMap & AccuLogs installed on Windows Server 2008, 2008 R2, 2012, 2012 R2, and 2016.

Anti-Virus / Antimalware

Actively scanning anti-virus and antimalware platforms can have an adverse effect on the performance of AccuMap and AccuLogs. With the proper implementation of exclusions however these effects can be avoided and allow for a superior end user experience.

Exclusions

Depending on which type of Anti-Virus/Antimalware you are running some exceptions will need to be applied to ensure the best AccuMap & AccuLogs performance.

UNC paths should be used for exclusions in place of mapped drive locations.

Files

The following files are broken down by location and should be added to your exclusion lists.

AccuMap Settings Folder

By default located in the end users AppData folder (**Example: %appdata%\accumap\settings**)

- AccuMap.config
- AccuMap.log
- AccuMapMapMRUFiles.ini
- AccuMapMapMRUPlaces.ini
- appdatalist.txt
- ControlStates.xml
- DataCardMRULists.ini
- DataCardPrintConfig.xml
- InspectActionBindings.config
- LayerTemplateCatalog.xml
- ProductionGraphTemplates.xml
- QuerySettings.xml
- QuickSearchConfig.xml
- RibbonDataCardConfig.xml

AccuMap User Directories

Usually located at the root of the end users local primary drive (**Example: C:\AccuMap**)

- default.cfg
- sssk.dat (if applicable)
- ufatr.dat
- ufatr.idx
- userDirlist.txt
- utopa.dat
- utopa.idx
- uwela.dat
- uwela.idx

AccuMap Shared Folder

By default located in the root install folder of AccuMap (**Example: *\Apps\IHS\Shared**)

UNC paths should be used for exclusions in place of mapped drive locations.

- Sssk.dat
- Chdarea.lic
- Orthoarea.lic (If licensed)

File Types/Extensions

Some platforms will still scan files despite being excluded based on heuristics. To avoid this, the following file extensions can be added to exclusion lists.

For concerns regarding the exclusions of files types such as .bin or .dat, please see the section on [Specific File Names](#).

*Please note that * denotes a wildcard placeholder.*

- | | | |
|-----------------------|-----------|--------------|
| • *.accumap | • *.inx | • *.shp |
| • *.accumapindex | • *.lns | • *.shx |
| • *.accumap_image_cac | • *.ln0 | • *.sx0 |
| he | • *.ln1 | • *.sx1 |
| • *.axp | • *.ln2 | • *.sx2 |
| • *.axs | • *.lwell | • *.tbl |
| • *.bin | • *.map | • *.tct |
| • *.btr | • *.mb | • *.tzn |
| • *.cll | • *.nme | • *.var |
| • *.clx | • *.pls | • *.vix |
| • *.dat | • *.prj | • *.wls |
| • *.db | • *.pts | • *.xsc |
| • *.dbf | • *.px | • *.xs_ |
| • *.dct | • *.pt0 | • *.xsection |
| • *.dsc | • *.rgn | • *.xg0 |
| • *.huf | • *.rg\$ | • *.yg0 |
| • *.idx | • *.idx | |

Executables/Processes

These executables/processes are located in the root install folder of AccuMap (**Example: *\\Apps\\IHS\\Shared**)

UNC paths should be used for exclusions in place of mapped drive locations.

- | | |
|-----------------|------------------------|
| • accucorn.exe | • IhsProfileViewer.exe |
| • AccuMap.exe | • Incident Manager.exe |
| • AccuNet.exe | • LicenseMonitor.exe |
| • AccuXCore.exe | • peepimp.exe |
| • Current.exe | • topsMgr.exe |
| • ddevview.exe | • Xsec32.exe |
| • exportmgr.exe | • Xsv.exe |

Microsoft Exclusions

The following Windows Processes and executables should be excluded from Anti-Virus scanning:

- Spoolsv.exe
- Splwow64.exe

Microsoft also provides comprehensive documentation on custom settings that can be applied for further performance improvements while running Anti-Virus/Antimalware in enterprise environments.

<http://support.microsoft.com/kb/822158>

Other Exclusions

Golden Software – Surfer

If end users are doing contouring via Surfer ensure that the **Surfer.exe** has been added to your Anti-Virus solutions exclusion list. Depending on your install type (32bit or 64bit) the executable is located within the Program Files folder.

Platform Notes

Depending on the anti-virus platform you are employing there may be additional notes below.

BitDefender

The free version of BitDefender only provides an on/off state in which to protect a machine and provides no configuration dialogs for specific customization.

In the 2013/2014 version there is a bug that may result in exclusion lists being ignored, which in turn can result in slower AccuMap performance.

If you are running the local BitDefender firewall you will also need to provide an exception for the AccuMap directories.

[Required exclusions can be found here.](#)

ESET

It is important to note that with ESET you must add all necessary files to both the main exclusion list, as well as the "real-time file system protection". Failing to add the required information in both sections will result in a slower performing AccuMap.

[Required exclusions can be found here.](#)

Copy & Paste Exceptions

The following section provides you with preformatted entries that can be copy/pasted into your ESET Security application.

File Types

accumap, accumapindex, accumap_image_cache, axp, axs, bin, btr, cli, clx, dat, db, dbf, dct ,dsc, huf, idx, inx, lns, ln0, ln1, ln2, lwell, map, mb, nme, pls, prj, pts, px, pt0, rgn, rg\$, idx, shp, shx, sx0, sx1 , sx2, tbl, tct, tzn, var, vix, wls, xsc, xs_, xsection, xg0, yg0,

Network Scanning

We advise that this feature be disabled on client/end user machines. If left on, while launching AccuMap this scanning tool can prevent the application from opening even with proper exceptions in place.

LANDesk

Exclusion entries are required in three separate sections of the LANDesk security platform to ensure proper performance of AccuMap. The "Real-time Protection" tab and "Virus Scan tab" in the anti-virus settings on the core server, as well as in the Trusted Items list on the client.

For further information on adding exceptions:

<http://community.landesk.com/support/docs/DOC-6920>

[Required exclusions can be found here.](#)

Microsoft SystemCenter2012 / Endpoint / Security Essentials / Antimalware

Due to the heuristic features of Microsoft's anti-virus platform, files may still get scanned despite being located within an excluded directory or selected for individual exclusions. It is advised that the file extensions be added to the exclusion lists along with the listed processes and executables.

[Required exclusions can be found here.](#)

Copy & Paste Exceptions

The following two sections provide you with preformatted entries that can be copy/pasted into your Microsoft Security application.

Please note that there is a character entry limit in the Microsoft SystemCenter2012 / Endpoint / Security Essentials / Antimalware console. While the preformatted text below fits within this size limit, other entries may need to be adjusted to ensure nothing is missed.

File Types

*.accumap; *.accumapindex; *.accumap_image_cache; *.axp; *.axs; *.bin; *.btr; *.dll; *.clx; *.dat; *.db; *.dbf; *.dct; *.dsc; *.huf; *.idx; *.inx; *.lns; *.ln0; *.ln1; *.ln2; *.lwell; *.map; *.mb; *.nme; *.pls; *.prj; *.pts; *.px; *.pt0; *.rgn; *.rg\$; *.idx; *.shp; *.shx; *.sx0; *.sx1; *.sx2; *.tbl; *.tct; *.tzn; *.var; *.vix; *.wls; *.xsc; *.xs_; *.xsection; *.xg0; *.yg0;

Processes

accu32.exe; accucorn.exe; AccuMap.exe; AccuNet.exe; AccuXCore.exe; AdminConfigTool.exe; Current.exe; ddevview.exe; Exportmgr.exe; IHS.Layer.Downloader.exe; IHSProfileViewer.exe; LicenseMonitor.exe; Map.IHSLayerDownloader.Diagnostics.exe; Peepimp.exe; RegistrarAccuMapComponents.exe; TopsMgr.exe;

Specific Files

A preformatted copy of all specific file exclusions is available if required. Please contact IHS directly to get a copy for Microsoft's Antivirus platform.

Symantec Endpoint Protection

The Symantec product SONAR (**S**ymantec **O**nline **N**etwork for **A**dvanced **R**esponse) currently only supports folder exclusions and not individual file extensions; in order to exclude the required file types the parent folders will need to be added to the exclusion lists. All entries should be excluded from all forms of scanning.

Tamper Protection exceptions should also be created if you are using Symantec EndPoint Protection to avoid blocking AccuMap from making registries changes.

[Required exclusions can be found here.](#)

Symantec Scan Engine

Symantec Scan Engine does not allow for specific files or extensions to be excluded from its scanning process; however tests performed internally at IHS show that it shouldn't have an effect on application performance. It is advised however that the "Advanced Heuristics" feature, which is off by default, remain disabled.

[Required exclusions can be found here.](#)

Trend Micro Office Scan

Exclusions need to be entered in both the OfficeScan management console as well as the Worry-Free Business Security (WFBS) console. Manual and Scheduled scans should also be set to enable the exception lists.

[Required exclusions can be found here.](#)

System Configuration

Permission Requirements

For network based installs users will need Read/Write/Modify access to the primary install location of AccuMap & AccuLogs (Example: Z:\Apps\IHS\)

Shared Folder

Keeping a clean and organized shared directory can have a major impact on the performance of AccuMap in a network install based environment.

Common shared directories should be used for files that are used companywide such as proprietary layers or maps. Individual or specific groups within an organization should have their shared files kept in separate locations to prevent them from being loaded into each user's machine when the application is launched.

User Top Files

Storing User Top files within the shared folder should be avoided as it can lead to broad performance issues for all users. The best method for users to share out their Top files is via a separate network folder from which users can access their desired specific files without having an effect on all users.

Windows Firewall

The following executables/processes should be allowed to pass through the Windows Firewall. All of these executables are located within the primary installation folder for AccuMap.

If your organization employs an alternative local firewall application on end user machines the listed executables/processes should be added to the applicable exclusion lists.

UNC paths should be used for exclusions in place of mapped drive locations.

- accu32.exe
- accucorn.exe
- AccuMap.exe
- AccuNet.exe
- AccuXCore.exe
- AdminConfigTool.exe
- Current.exe
- ddevview.exe
- Exportmgr.exe
- IHS.Layer.Downloader.exe
- IHSProfileViewer.exe
- LicenseMonitor.exe
- Map.IHSLayerDownloader.Diagnostics.exe
- Peepimp.exe
- RegistrarAccuMapComponents.exe
- TopsMgr.exe
- Xsec32.exe
- Xsv.exe

Other Local Firewall

If your organization is using a separate third party local firewall on end user machine it is advisable that the same exceptions mentioned in the [Windows Firewall](#) section be applied.

Offline Files

Offline files allow for network files and folders to be synced to a local computer for use when no connection to said network is present. For most IT environments this feature is generally ignored and/or unused and in most cases safely disabled with no end user issues.

If not in use by your organization it is advisable to disable 'Offline Files' on end users machines. By default it is enabled in Windows versions Vista, 7, and 8, and disabled by default in Server 2008 & 2012. By leaving this feature enabled it on can result in unnecessary calls and checks on attached network drives, even if no files are in fact set to sync. These calls can have an adverse effect on network performance as well as read/write speeds of files.

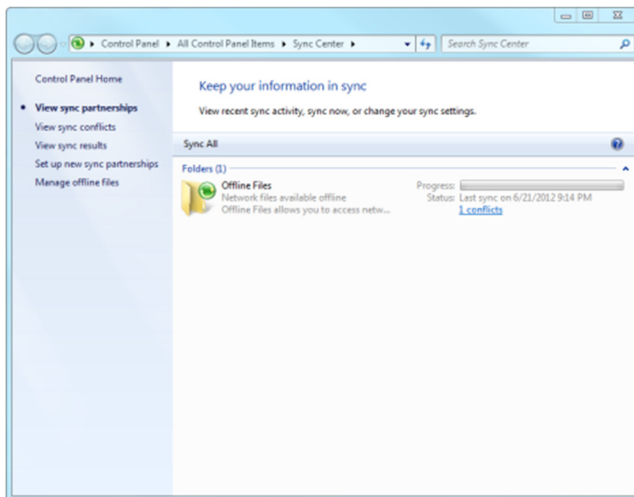
Disable Via GPO

This feature can be disabled on a domain via GPO: [http://technet.microsoft.com/en-us/library/cc759721\(v=ws.10\).aspx](http://technet.microsoft.com/en-us/library/cc759721(v=ws.10).aspx)

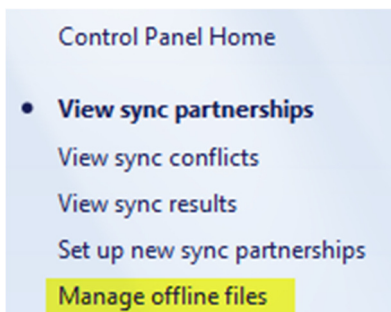
Disable Locally

To disable this feature locally follow these steps:

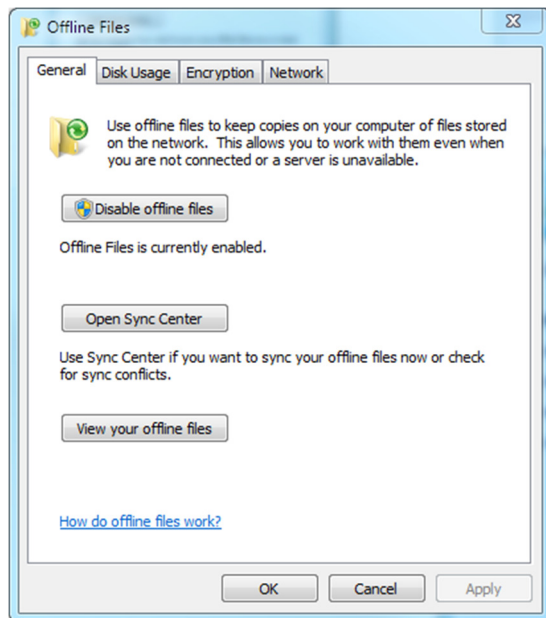
1. From the Control Panel open Sync Center



2. In the column on the left select "Manage Offline files"



3. Select "Disable Offline files" button and reboot the machine when prompted



Sharing Wizard

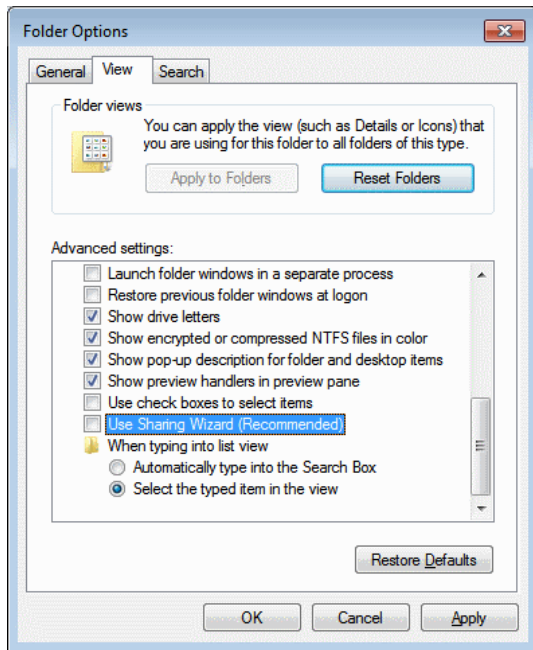
The 'File Sharing Wizard' is used in home network environments to allow for a simpler network setup. Much like Offline Files this feature will make extra calls to network locations even if it is not being utilized.

Provided your environment is a Windows Domain you can safely disable this feature to prevent unnecessary calls and checks on attached network drives or viewable network devices. These calls can have an adverse effect on network performance.

Disable Locally

To disable this feature locally follow these steps:

1. From the Control Panel select Folder Options
2. Select "View" tab and scroll down to "Use Sharing Wizard (Recommended)"



3. Uncheck this option and select "OK"

Printer Configurations

Printing performance and time can be affected by a number of different factors such as size or quality of the print job or network performance. The following recommendations can help reduce printing times for end users.

General Printer/Plotter Settings

Ensure that the latest drivers are always installed for your printer or plotter. In most cases performance issues with printing have been resolved by updating the drivers to their newest releases.

Appropriately adjusting the driver settings either locally at the printer/plotter or via the end user driver settings can have a significant increase in printing performance and time.

To avoid setting defaults that may not apply to all print jobs, these settings can be stored in preset modes that end users can select when they go to print from AccuMap or AccuLogs.

The following settings have been generalized to apply to a number of different devices/manufactures and are accessed by the "Printer Preferences" option in the "Devices and Printers" window when you right click on a specific device.

- **Paper Type:** Provide a set paper type at the Plotter or in the driver to reduce spooling/processing time. Generally, **Plain** paper settings work for the majority of printing done on plotters. Most often printers and plotters have this setting left at "**Any**", which results in the device making assumptions on the paper type, increasing spooling time and file size. Whenever possible, select the specific type of paper being used by the plotter.
- **Paper Source:** While generally left to the "**Printer auto select**" option, it is recommended that "**Paper Source**" be set to "**Roll**" for printing from AccuMap & AccuLogs when printing to a Plotter. Normal printers can still be set to a specific source or tray, provided it contains the proper paper size the end user wishes to print to.
- **Color Management:** Presetting a default color management scheme can greatly reduce the print times associated with larger print jobs. Depending on the manufacture of your device this can be set to "**Application**" or "**Printer**". Changing to "**Printer**" and selecting an appropriate color profile such as "**sRGB**" is recommended. By making this change you are telling the printer to handle color instead of AccuMap.

The following settings have been generalized to apply to a number of different devices/manufactures and are accessed by the "Printer Properties" option in the "Devices and Printers" window when you right click on a specific device.

- **Spooling Settings:** Having the spool settings set to "**Start printing immediately**" will result in the user regaining control over AccuMap faster after submitting a print job.

Printer/Plotter Driver Types

Fine tuning the settings for your printer or plotters driver can result in a boost to their performance printing from AccuMap. Jobs should spool quickly and start printing in one minute or less. If the performance of your printing is poor, please refer to the following information to make the necessary adjustments to your driver.

PS or PostScript Drivers

PostScript drivers result in the best performance from both plotters and general printers when working in AccuMap. Unlike PCL, PS drivers are better suited to handle the vector based print jobs created within the application. In most cases the latest PS release will work best, but depending on the age of the printer or plotter PS3 drivers have also worked well.

PCL Drivers

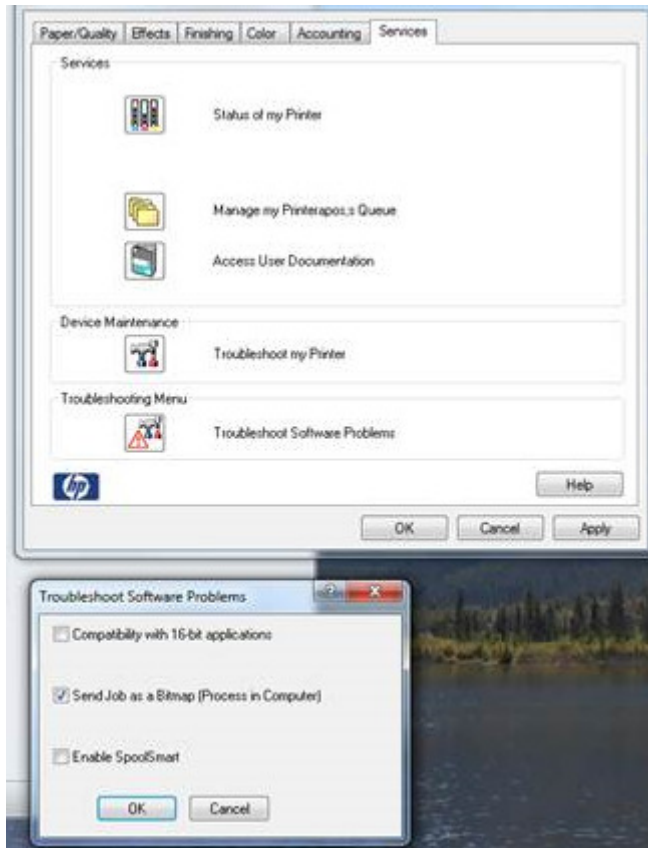
PCL drivers should be avoided when attempting to print from AccuMap. While smaller prints (Legal size paper or smaller) generally tend to work fine larger print jobs can result in missing artifacts or graphics. This is due to PCL drivers poor handling of vector based print jobs. Users looking to print to plotters should be setup with either a PostScript driver or in the case of some HP plotters, the HPGL2 driver (using the proper settings).

HPGL2 Drivers (HP Plotters)

Much like the PCL, the HPGL2 driver is not always great at handling large print jobs. This can result in lost artifacts, missing details, and extremely slow spool times. To fix this, most HPGL2 drivers have the ability to handle all jobs as raster based Bitmaps.

To make this change start by accessing the "**Printer Properties**" option in the "**Devices and Printers**" window when you right click on the printer or plotter in question and select either of the following tabs, depending on your printer model:

- **Services:** Select the "**Troubleshoot Software Problems**" button at the bottom of the window. Disable "**SpoolSmart**" and enable "**Send Job as Bitmap (Process in**

Computer)"

- **Advanced:** In the list of options, ensure that **"Send Job as Bitmap"** is set to **"enabled"**

PDF Writers

End users may experience very slow print times and large PDF file sizes when printing from AccuMap if the DPI settings for their PDF writers are too high. Default settings for DPI settings are dependent on the application being used and are generally in the 600-2400 range.

In almost all cases PDF's should be created at the 150-300 DPI range as there is little to no difference in quality to the end user. Within this range the quality of the file is still high enough to be edited or worked on in other applications such as Adobe Illustrator, but keeps the file size small and print times fast.

Adjusting these settings for most PDF writers are as easy to change and can be set as a permanent change or adjusted for each print job.

1. Go to the computer's "Control Panel"
2. Select "Devices and Printers"
3. Right click on the PDF writer you wish to adjust
4. Select "Printer Preferences"
5. Select the "Layout" tab and click the "Advanced..." button in the bottom right of the window
6. Under the "Graphic" header, change the "Print Quality" setting to something within the 150-300 range. In most cases 300 DPI is the best choice.
7. Click "OK" on the current window
8. Click "OK" on the "Printer Preferences" window

AccuMap Downloader

The AccuMap downloader utility enables you to download the latest version of the AccuMap update/ install files for Monthly and Currency updates through a simple one-click application.

In the past downloading the later release from the AccuMap Updates website required the user to save four individual files to a desired location and unpacking them into a single directory. This system did not allow for the ability to schedule when the download took place or for a checksum to ensure zero file corruption or errors.

As of AccuMap 25.03 (March 26, 2015) this new tool has been included with all updates and is located in the install directory of the application in the "**AccuMap_Downloader**" folder. You can also download the tool from the updates site <http://accumapupdates.ihsenergy.com/>.

There are two different versions of the downloader, one for IPL data set and another for the ACD. Both are available on the AccuMap Update site, or depending on which version of AccuMap you are running you will have an executable labeled as either of the follow in the "**AccuMap_Downloader**" folder:

- **AccuMap_IPL.exe**
- **AccuMap_ACD.exe**

Please note that you will only find one of the above executables in your "AccuMap_Download" folder, specifically the one that matches your data type (ie. IPL or ACD)

Downloader Features

Checksum Verification

The downloader utility has a built in checksum to verify file integrity upon download completion. In the event of an error or corruption the downloader deletes all files and restarts.

Pause & Resume

In the event of a network outage or loss of internet the downloader can pause and resume without having to start the process over. The user also has the ability to manually pause and resume the download through the application window.

Details & Logging

Information about actions that the downloader is taking can be viewed in the "Details" window of the application.

Scheduling

Using windows Task Scheduler users can set when the application should download the latest release of AccuMap. This allows for the downloader to run outside of work hours as not to impact internet/network performance.

VPN-less & Portable

This application does not require a connection to the IHS VPN, and can be run off of any internet connected PC. The application is also portable and requires no installation in order to use.

Configuration Notes

The AccuMap Downloader creates a **user.config** file that stores the desired/set location for downloaded files. This is located in the following directory:

C:\Users\%USERNAME%\AppData\Local\IHS\AccuMap_IPL.exe_StrongName_fxknvedwikwtltdz21hw2dkfydynv3fd\1.0.0.0

Other Notes

Wait Chain Issues & Halts

In some cases when running the AccuMap install shield or workstation setup executable a wait chain deadlock may occur. When this occurs the _main.exe application is visible from the task manager, but the application is halted, waiting on the release of a resource from another application. In order for the process to continue the guilty application causing the halt needs to be found and ended.

Generally the following applications cause this deadlock, ending these processes will result in the installer or workstation setup continuing as normal.

- itype.exe – Microsoft IntelliType Pro
- lync.exe – Microsoft Lync 2013
- setpoint.exe – Logitech Set Point

To find which process is preventing the installer from running you can use a built in feature of Windows 7 (or newer) called Wait Chain Traversal (WCT).

<https://msdn.microsoft.com/en-us/library/ms681622%28VS.85%29.aspx?f=255&MSPPError=-2147217396>

To analyze the Wait Chain in Windows 7 open the Resource Monitor and right click on the _main.exe in the CPU window, from the menu the option to “Analyze Wait Chain...” will be available. It will show a list of applications or processes preventing the installer from completing.

4K/Hi-DPI Monitors

Monitors supporting 4K or Hi-DPI resolutions can result in application scaling issues within AccuMap. Currently the only solution is to set screen resolution at or under 1900x1200 (Standard 24” monitor) as well as ensure Windows text scaling is at the system default of 100%.

Hyper-V

Please be aware that all Hyper-V related notes are from testing done with Microsoft Server 2012R2.

In the following notes Virtual Machine will be referred to as VM.

- Dynamic RAM settings for VM’s in Server 2012 R2 can cause issues with AccuMap. RAM for the VM hosting AccuMap should be static.
- Adjusting the CPU count assigned to a VM that is hosting AccuMap can cause issues with the License Manger. Should you need to increase or decrease the CPU count you will need to get new license files cut by IHS.
- Exporting a VM from a Hyper-V server and reimporting it to different server will cause the License Manger to fail requiring new license files to be cut.

- Session based remote environments running AccuMap are currently not very common, however has been proven to work properly. Please contact IHS for more information.
- Clustered Failover environments have not yet been tested but may result in the failure of the AccuMap License Manger.
- Adjusting the RAM levels for the VM hosting the IHS AccuMap & AccuLogs Licensing service can result in license file conflicts.

Software Conflicts/Issues

The following software has known issues or conflicts with AccuMap & AccuLogs; here you will find solutions and workarounds.

Adobe Acrobat/Reader – Protected Mode

After printing a map to a PDF file, regardless of how which tool created the PDF (CutePDF, Acrobat, etc...) images may not load properly when viewed through Adobe Acrobat/Reader.

To resolve this issue ensure that "Enable Protected Mode at startup" is disabled in the Preferences window. Depending on which version of Acrobat/Reader is installed this setting will be in one of two locations.

For version 10 or newer this setting can be found under: *File > Preferences > Security (Enhanced)*

For version 9 or older this setting can be found under: *File > Preferences > General*

Citrix Virtual Desktop Agent Core Services (Version 5.6.400.16)

In some rare cases a corrupted install/uninstall of the Citrix VDA can result in the Core Analysis feature functioning improperly. This is a result of the RSHook.dll entry remaining in the AppInIt_DLLs path.

Provided that your organization is not utilizing the "Seamless Window" feature in Citrix VDA you can safely remove the RSHook.dll from the following registry entry:

[HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Windows NT\CurrentVersion\Windows\AppInit_DLLs]

Please note, registry edits should only be performed by qualified individuals, always make a backup before doing any work in the Windows Registry.

AppInIt_DLL Locations

32 bit DLL on 32 bit systems:

[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Windows\AppInit_DLLs]

64 bit DLL on 64 bit systems:

[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Windows\AppInit_DLLs]

32 bit DLL on 64 bit systems:

[HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Windows NT\CurrentVersion\Windows\AppInit_DLLs]

For more information on the AppInIt_DLL please refer to the follow Microsoft KB article.

[http://msdn.microsoft.com/en-us/library/windows/desktop/dd744762\(v=vs.85\).aspx](http://msdn.microsoft.com/en-us/library/windows/desktop/dd744762(v=vs.85).aspx)

Citrix Universal Print Driver & CutePDF/PDF Creator/Foxit PDF

While not specifically an issue with AccuMap, we have seeing problems when using the Citrix Universal Print Driver in place of the drivers that come packaged within CutePDF, PDF Creator, and Foxit PDF.

The result can be seen when printing a Data Card. All headings and bolded text will appear as black bars.

Setting the Citrix printers to use the appropriate drivers will fix this issue.

Microsoft GDI+ Errors

In May 2015, Microsoft issued a security update that resolved some vulnerabilities found in various Microsoft products (.NET, Silverlight, Office and Lync).

A known issue reported by Microsoft, when installing this security updates included crashing when using Windows GDI+ to create text outlines. Microsoft has created a patch that can be installed to correct this known issue.

Some AccuMap users have reported experiencing the GDI+ crash when trying to print. AccuMap uses the Microsoft GDI+ to create various objects within annotations and when printing. The error message that users would experience is attached to this message.

To read more about this known issue please visit the Microsoft support website:

<https://support.microsoft.com/en-us/kb/3045171>

To resolve the GDI+ issue please use the following link, which can also be found on the Microsoft support website, to install the security update:

<https://support.microsoft.com/en-us/kb/3065979>

We understand that installing security updates requires coordination and time. For a quick fix, IHS has found that by installing the AccuMap font files to your local machine users will no longer encounter this error when printing.

You can find the AccuMap font files in your current install within the Bin.Map folder. There are 4 True Type Fonts you will need to install: afsym405, ahsym405, awsym404 and shsym401.

Surfer (Versions 7, 8, & 9)

There are a number of reported issues with versions 7, 8, and 9 ranging from application instability to user access rights inside of Window's Domains that are resolved by running version 10 or higher.