IIS Easy Migration Tool - Quick Start Guide

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IIS Easy Migration Tool (IEMT) is a tool helping with the migration **from IIS 6** to IIS 6.0 / 7.0 / 7.5 / 8.0 / 8.5 / 10. This application is portable, no installation is required.

> *The IEMT works on Windows 2003 (IIS 6) and Windows 2008/2012/2016 (IIS 7/7.5/8/8.5/10).*
>
> *The IEMT does **not** work on Windows 2000, Windows NT 4.*

(The former name of the ***IIS Easy Migration Tool*** is ***IIS Sites Transfer***. The IIS Sites Transfer is able to migrate websites from IIS 6 to IIS 6 only. The IEMT can migrate websites from IIS 6 to IIS 6/7/7.5/8/8.5/10).

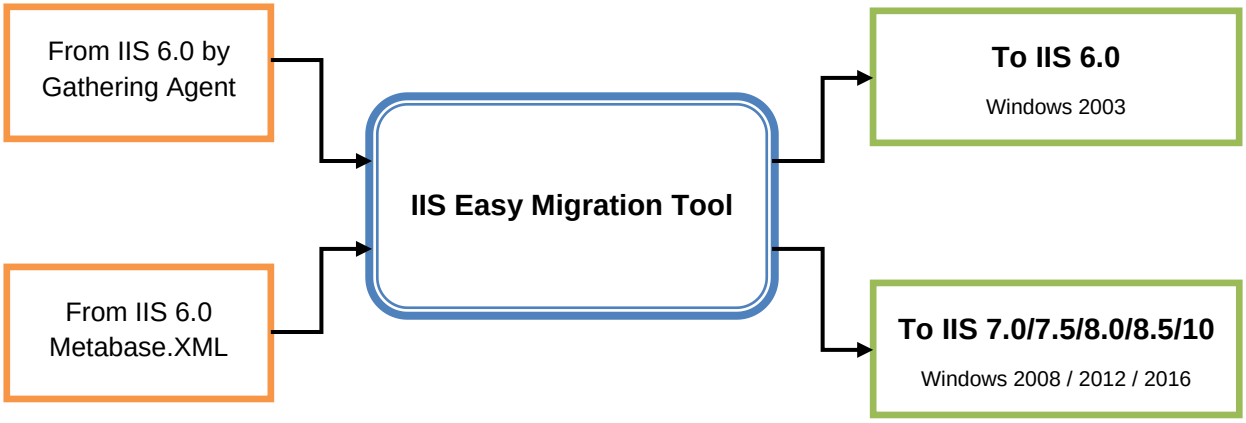
IIS Easy Migration Tool can work in 2 modes:

1. Migration from some IIS 6.0 server to other IIS 6.0 server.
2. Migration from IIS 6.0 server to IIS 7.0, 7.5, 8, 8.5 or 10 server.

Both the modes have 2 alternate ways of the data collection:

1. The first way is the ***GatheringAgent (GA)***. The GA is an application (supplied together with IIS Easy Migration Tool) that collects all the needed data from the source IIS server. This app collects the data about web sites, FTP accounts, SSL certificates, Windows users and groups, etc. This way is preferable.

2. The second way is using of ***metabase.xml*** file from IIS 6.0 server as a data source for IEMT. This way allows getting the information about web sites and FTP accounts only. This way should be used for disaster recovery purposes when the source IIS server is down.



System requirements:

- **Source server:** .NET framework 2.0 is required for the Gathering Agent
- **Destination server:** .NET framework 4.0 is required for the IIS Easy Migration Tool.

*Note: The IEMT is a GUI application, so currently it is not compatible with Server Core installation of Windows. You should either have **Full Installation** of Windows 2008, 2012 or Windows Server 2016 with **Desktop Experience**.*

Software registration and evaluation

It is possible to try IEMT for free. It works without a license key, but in this case it allows to migrate only a few items of each kind during a single migration session. (For example, it may allow to migrate 3 websites, 4 virtual directories, 5 FTP accounts, 2 SSL certificates and 1 Windows User Group during the evaluation session.)

You can buy a key at http://www.hoststools.com The license key makes the software fully-functional and remove all the limitations.

Please note that IEMT connects to http://keysys.hoststools.com (online licensing system) at the beginning of each session. So, please be sure the destination server firewall does not block port 80. IEMT sends its license key and gets a response ("valid" or "not valid"). Nothing else is sent or received.

Please contact us if your destination server does not have Internet access. We have a solution.

When you got a license key, please open ***Help - About...*** menu (in the IIS Easy Migration Tool) and enter your key. Then restart the program.

If there is "***Trial***" word in the IEMT window caption, the program is not registered and works in the evaluation mode.

Source server: The first way of data collection – using the Gathering Agent

1. Log in to your source IIS server and place the Gathering agent files to some folder. Then start ***gatheragent.exe*** as Administrator.

*It is important to run the Gathering Agent as Administrator. You must be logged on as a local administrator or provide the credentials of a member of the **local Administrators group**.*

You can log on as a domain administrator too. Usually it works. But it depends on your domain/server settings and is not guaranteed. So, it is better to use a local admin account.

To run an application with a full administrator access token:

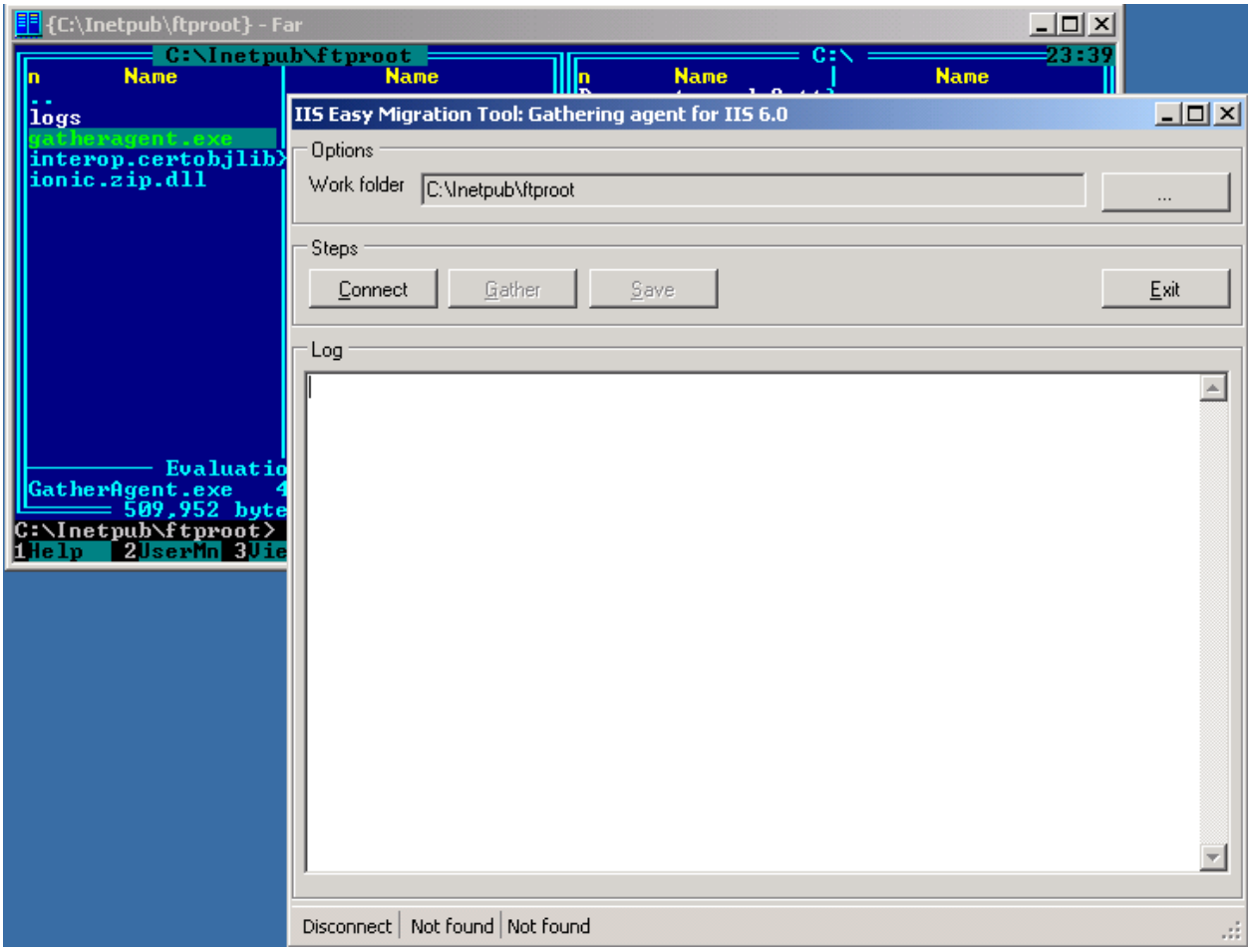
1. Locate the program icon or a shortcut in Windows Explorer.

2. Right-click the program icon or shortcut, and then click **Run as administrator**.

3. When the UAC message is displayed, do one of the following:

   • If you are logged on as a standard user, or if UAC is configured to always require credentials, enter the appropriate administrative credentials, and then click **OK**.

   • If you are logged on as an administrator and UAC is not configured to always require credentials, click **Yes** to start the application.

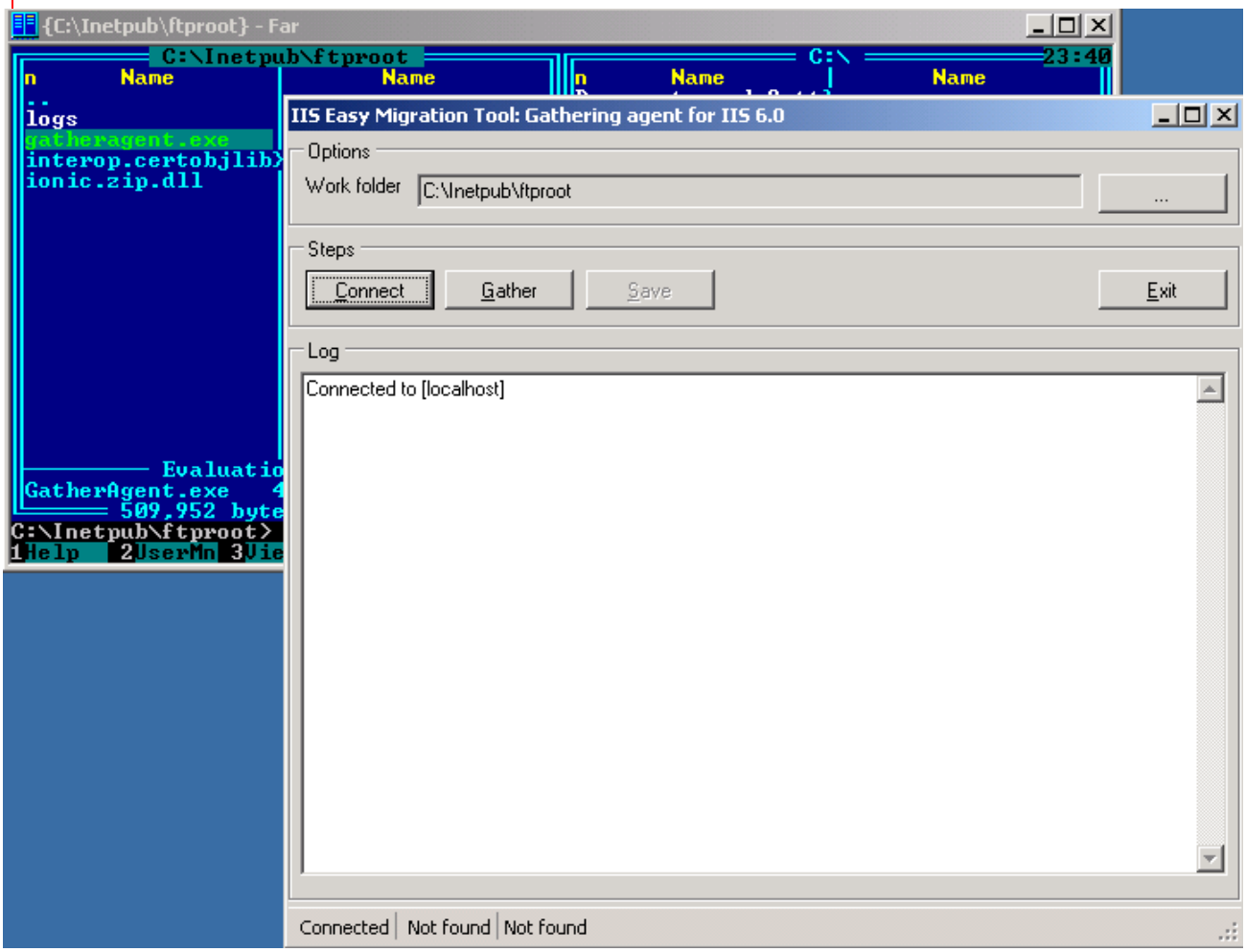


Work folder field shows a path to a folder where the data will be saved. All the log files created by the Gathering Agent will be saved to a sub-folder (***logs***).

Use the button with 3 dots (to the right of the ***Work folder*** field) to select other working folder if needed.

2. Click the ***Connect*** button to connect to IIS 6 server running on this machine.

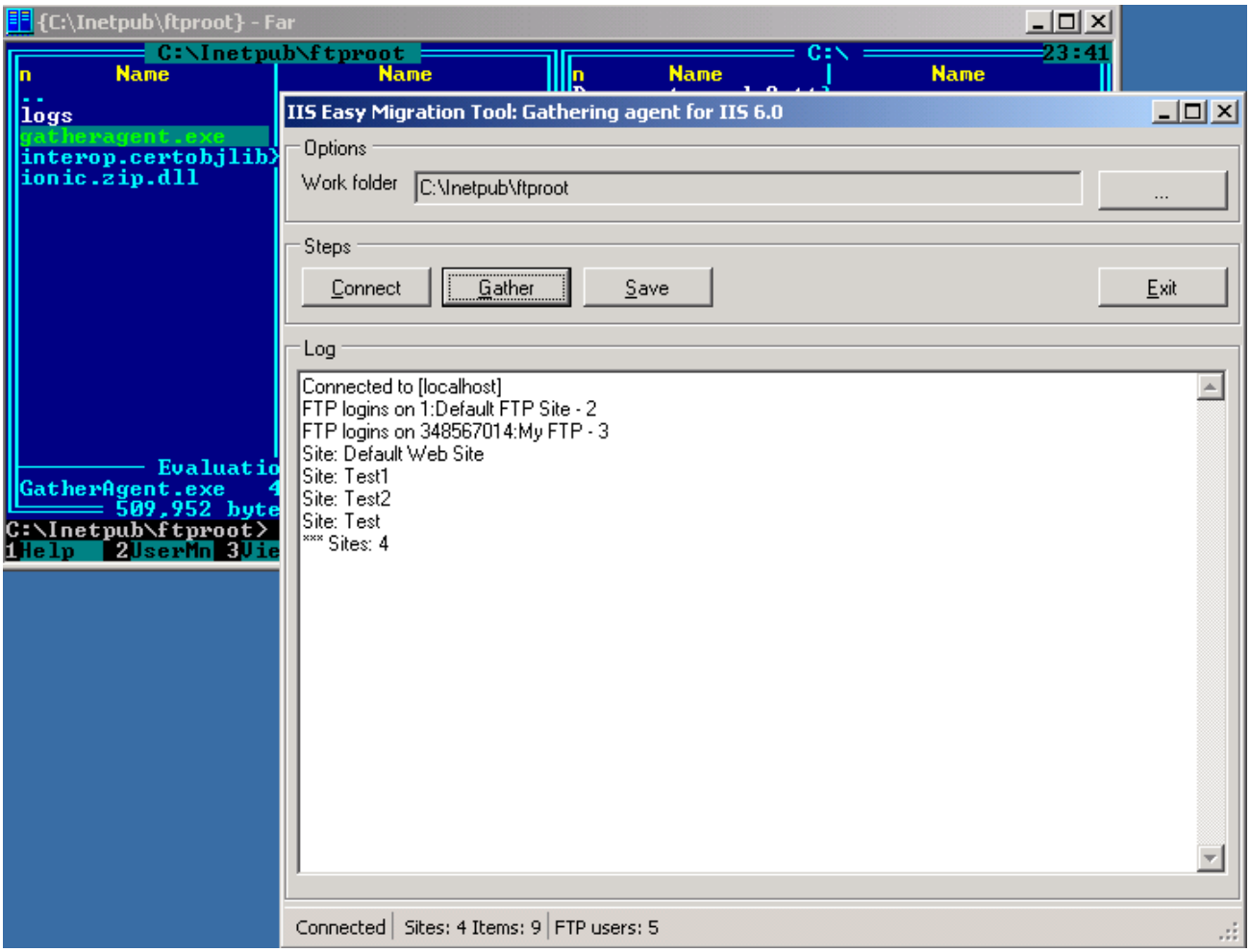
Please note that only local connection is used. The remote connections are not supported currently.



You will see a message about the successful connection in ***Log*** memo field and also "Connected" word in the status bar.

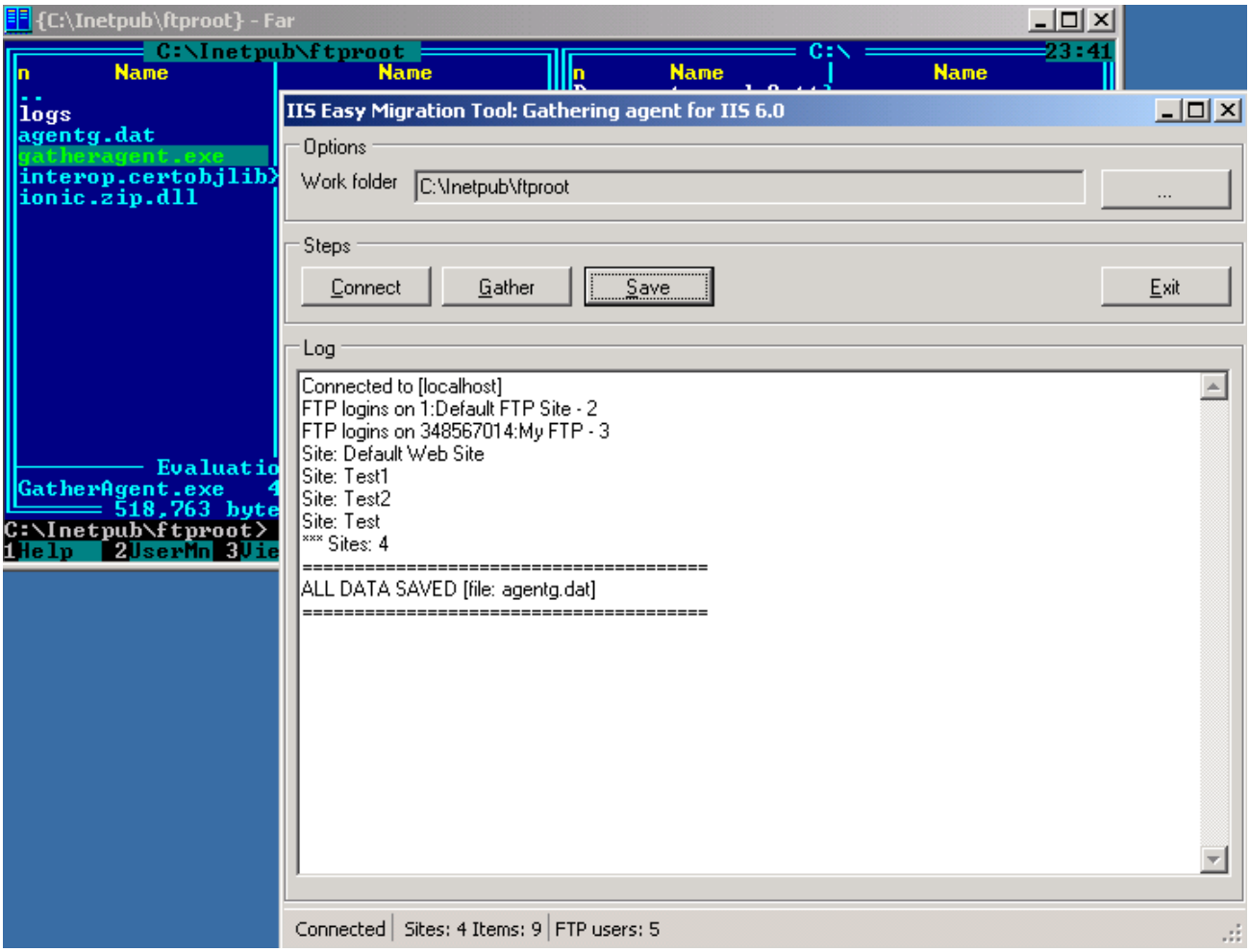
3. Click the ***Gather*** button to start the data collection.

The Gathering Agent will collect all the data needed for the migration. This process will take some time.



Once the data collection is finished, the program will show the list of the collected data and some stats in the ***Log*** field. Also it will show some brief stats (like “Sites: 70, Items: 120”) in the status bar.

4. Click the ***Save*** button to save the data to ***AGENTG.DAT*** file.



5. Click the ***Exit*** button to close the Gathering Agent.
6. Copy AGENTG.DAT to the destination server, it will be used by IEMT as a source data file.

Source server: The second way of data collection – using the METABASE.XML file

This way should be used only of there is no possibility to use the first way. For example, if the source server is down.

It is a 1-stage way: Just copy ***METABASE.XML*** file from the source server (or a backup copy) to the destination server. This file can be found in C:\Windows\System32\inetsrv folder usually. This file will be used by IEMT as a source data file.

> *Please note that **IP Security** parameters of web sites (and virtual directories) will not be migrated if you use Metabase.XML file. If you need to migrate **IP Security** properties you must use the Gatherig Agent.*

Destination server: The migration procedure

To start the migration you should have either ***AGENTG.DAT*** or ***METABASE.XML*** file. Please read above how to get them.

Very Important Note:

*The IEMT **does not** copy any files (.html, .aspx, .php, etc.) from the source server to the destination one! It does lots of useful things (creates the web sites and Windows users, sets the ACL/NTFS permissions and so on), but it does not copy the files. So, please, use some other software to copy the files first. It is possible to use WinZIP or WinRAR to zip the files/folders on the source server, copy the archive by FTP and unzip/unrar it on the destination server. Then run the IEMT, it will create the sites and set the permissions on those folders.*

*So, please, **first copy the files** (with any backup/restore software) **then run the IEMT**.*

Important Note:

The IEMT does not install frameworks and applications to servers. It will not install ASP.NET, .NET, PHP, ColdFusion, TomCat (Java) etc. So, if your websites need such frameworks, you should install them yourself.

Also the IEMT does not update installed frameworks.

For example, if you have PHP 5 installed on your destination server but a migrated website needs PHP 7, the IEMT will specify "PHP 7" handler in that website properties, but it will not install PHP 7 on your server. You should install it yourself.

1. Copy the IEMT files to some folder on the destination server and start IEMT.

*It is important to run the IIS Easy Migration Tool as Administrator. You must be logged on as a local administrator or provide the credentials of a member of the **local Administrators group**.*

You can log on as a domain administrator too. Usually it works. But it depends on your domain/server settings and is not guaranteed. So, it is better to use a local admin account.

To run an application with a full administrator access token:

1. Locate the program icon or a shortcut in Windows Explorer.

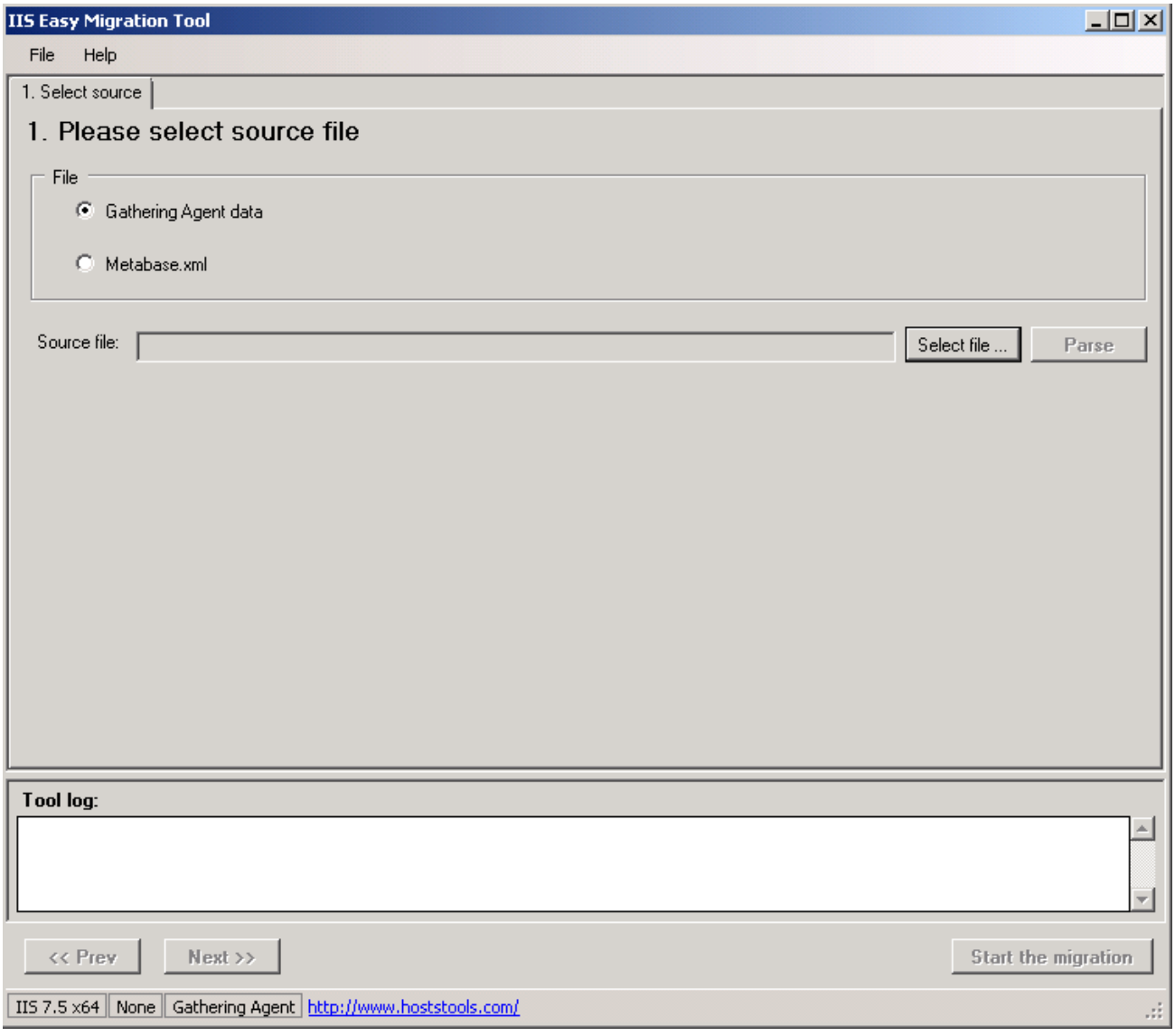
2. Right-click the program icon or shortcut, and then click **Run as administrator**.

3. When the UAC message is displayed, do one of the following:

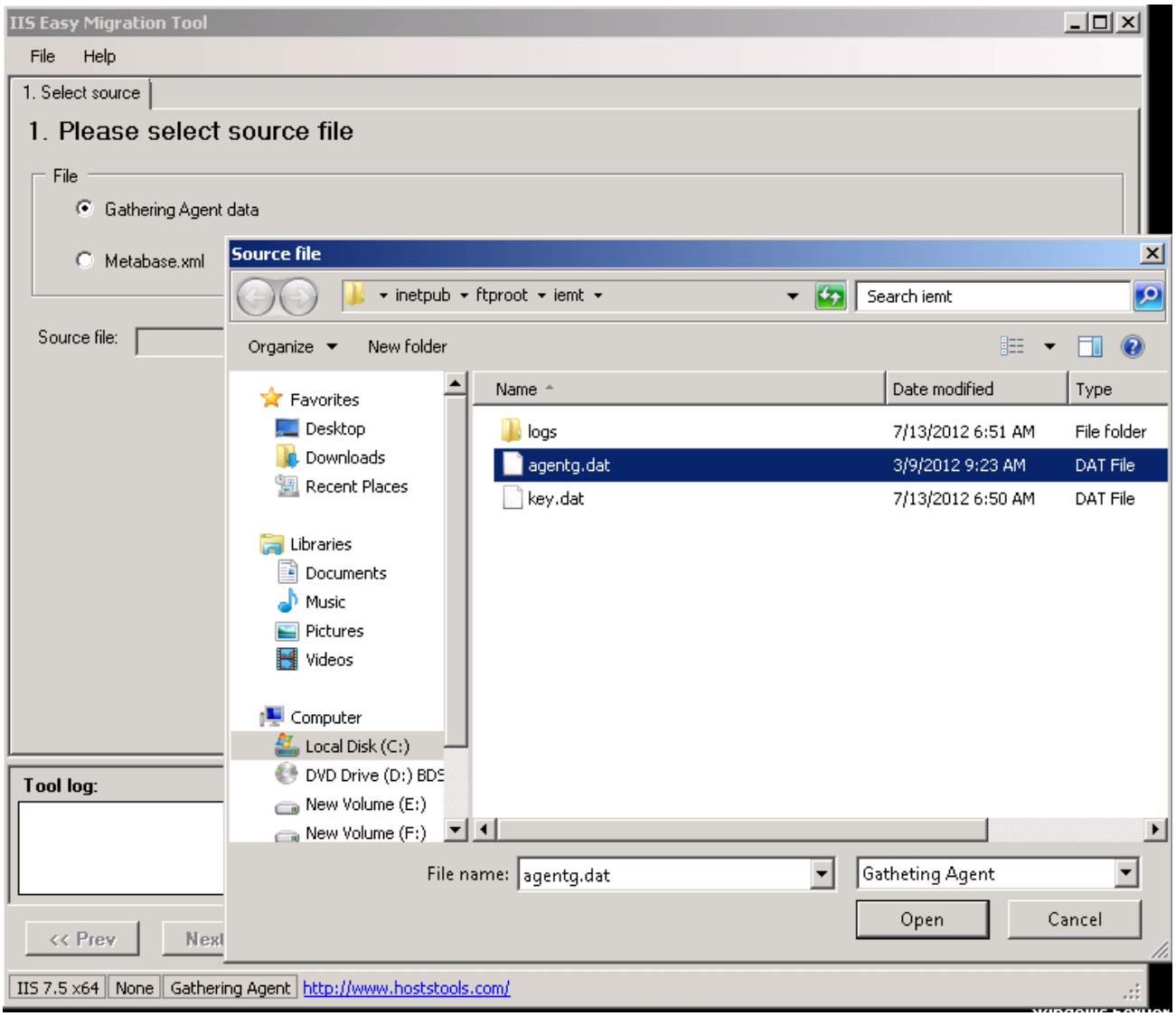
- If you are logged on as a standard user, or if UAC is configured to always require credentials, enter the appropriate administrative credentials, and then click **OK**.

- If you are logged on as an administrator and UAC is not configured to always require credentials, click **Yes** to start the application.

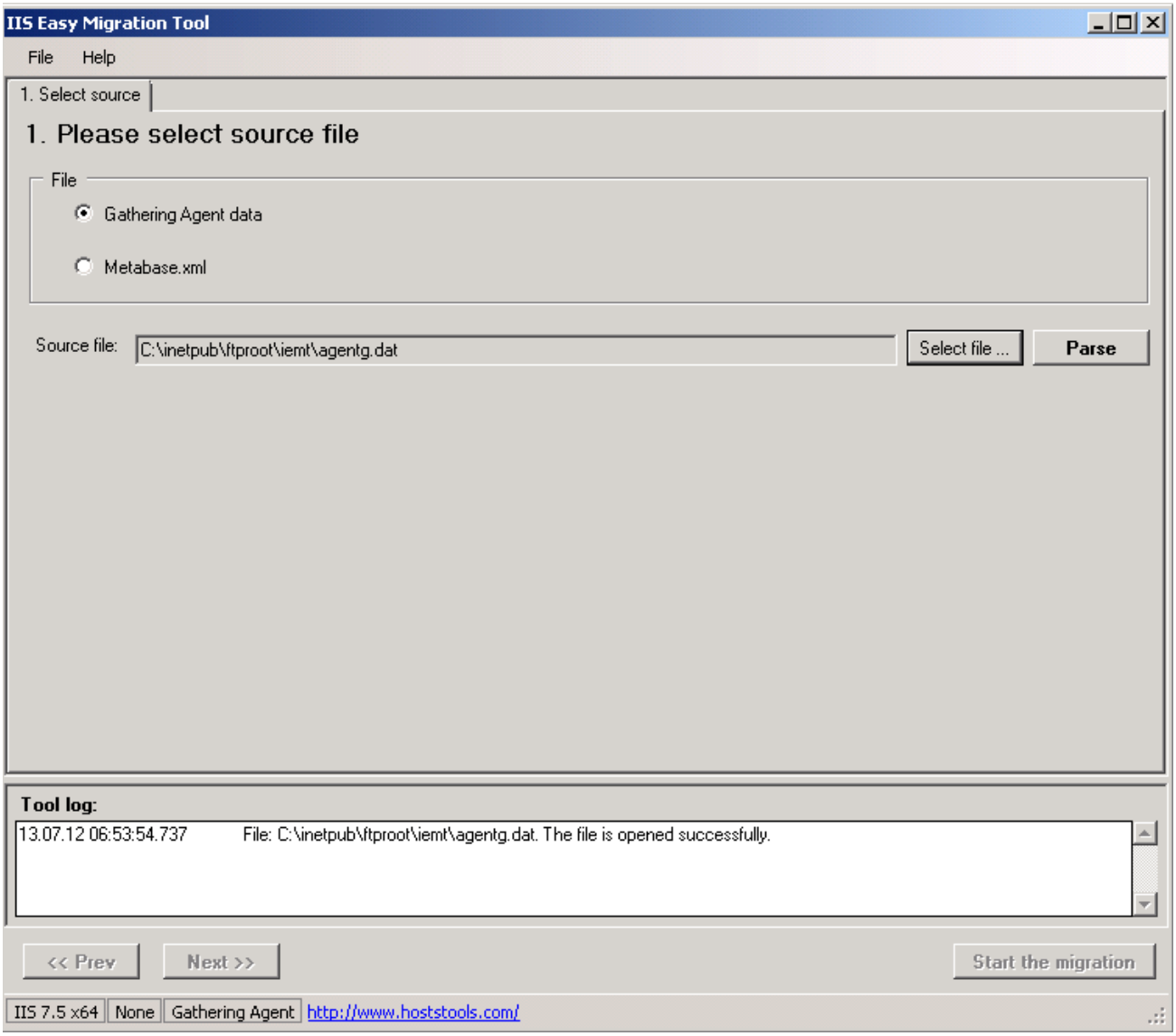
2. The program will detect the IIS version and show it in the status bar. (Like: “IIS 7.5 x64”)



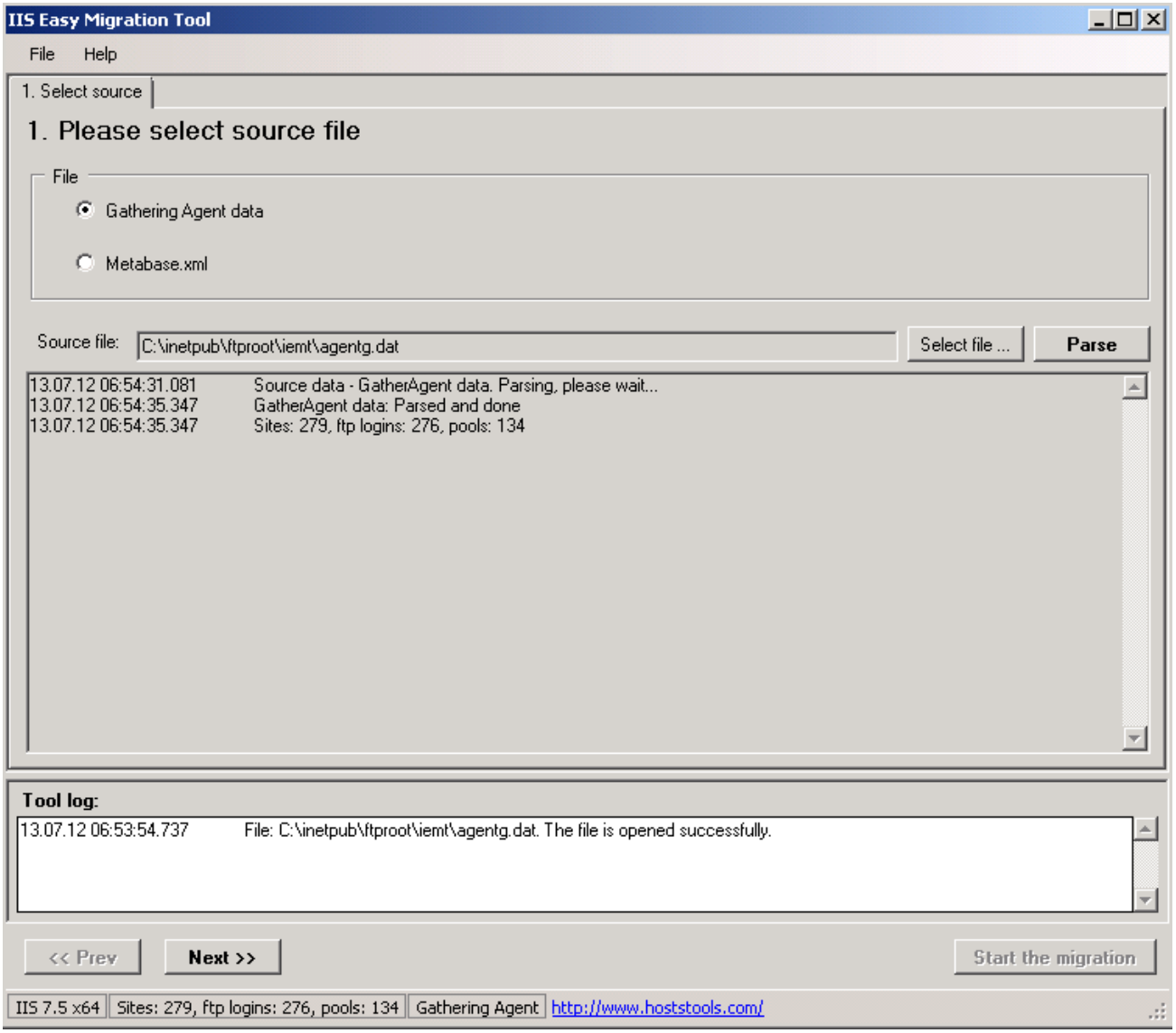
3. Select the data source type and click ***Select file …*** button.



4. Select the data source file and click ***Open***.

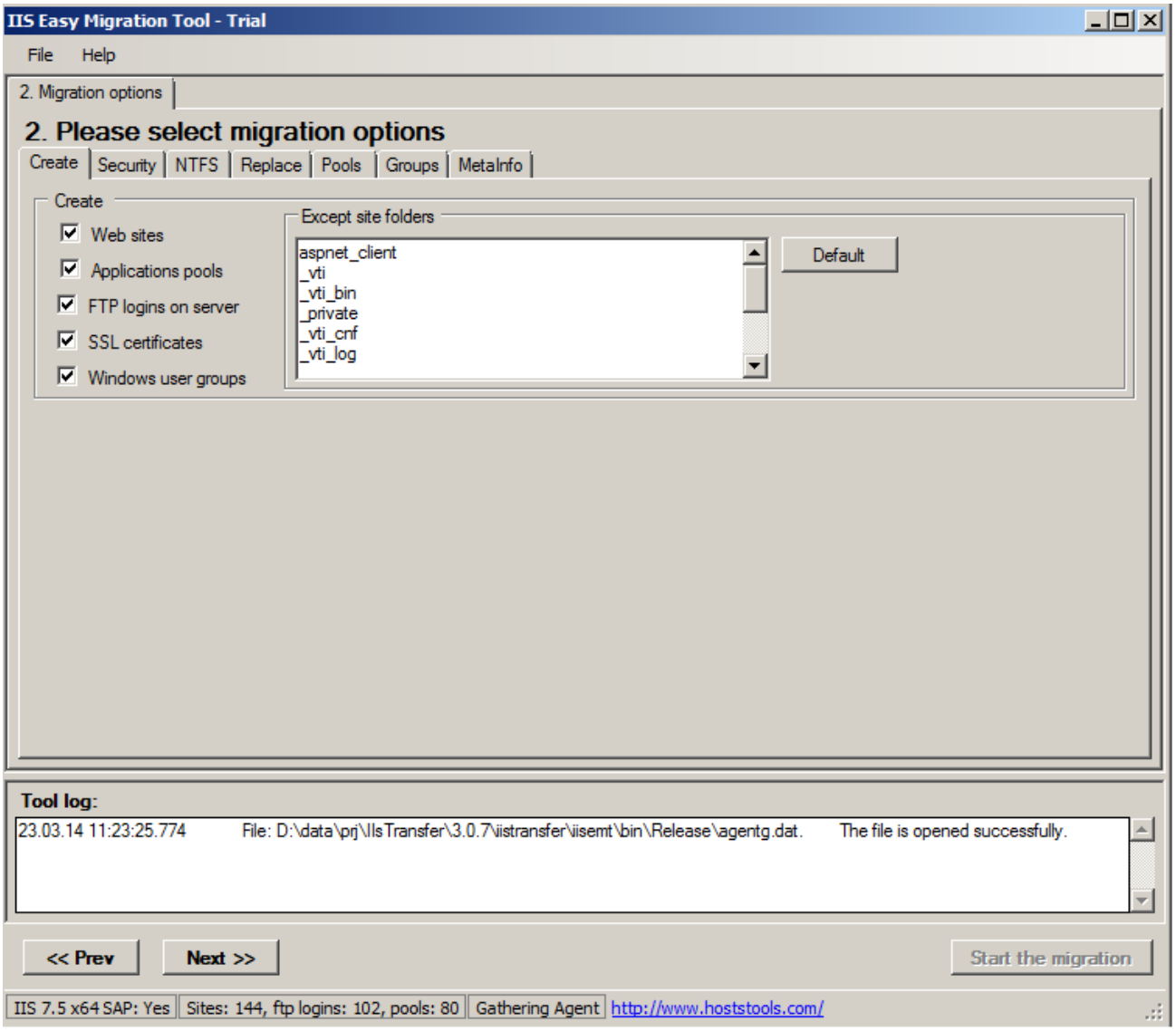


5. Click ***Parse*** button to start the source data analysis.



6. Once the parsing is finished you will see some stats. Click ***Next*** button to go to the next step.

7. This step is for the migration process settings and fine tuning.



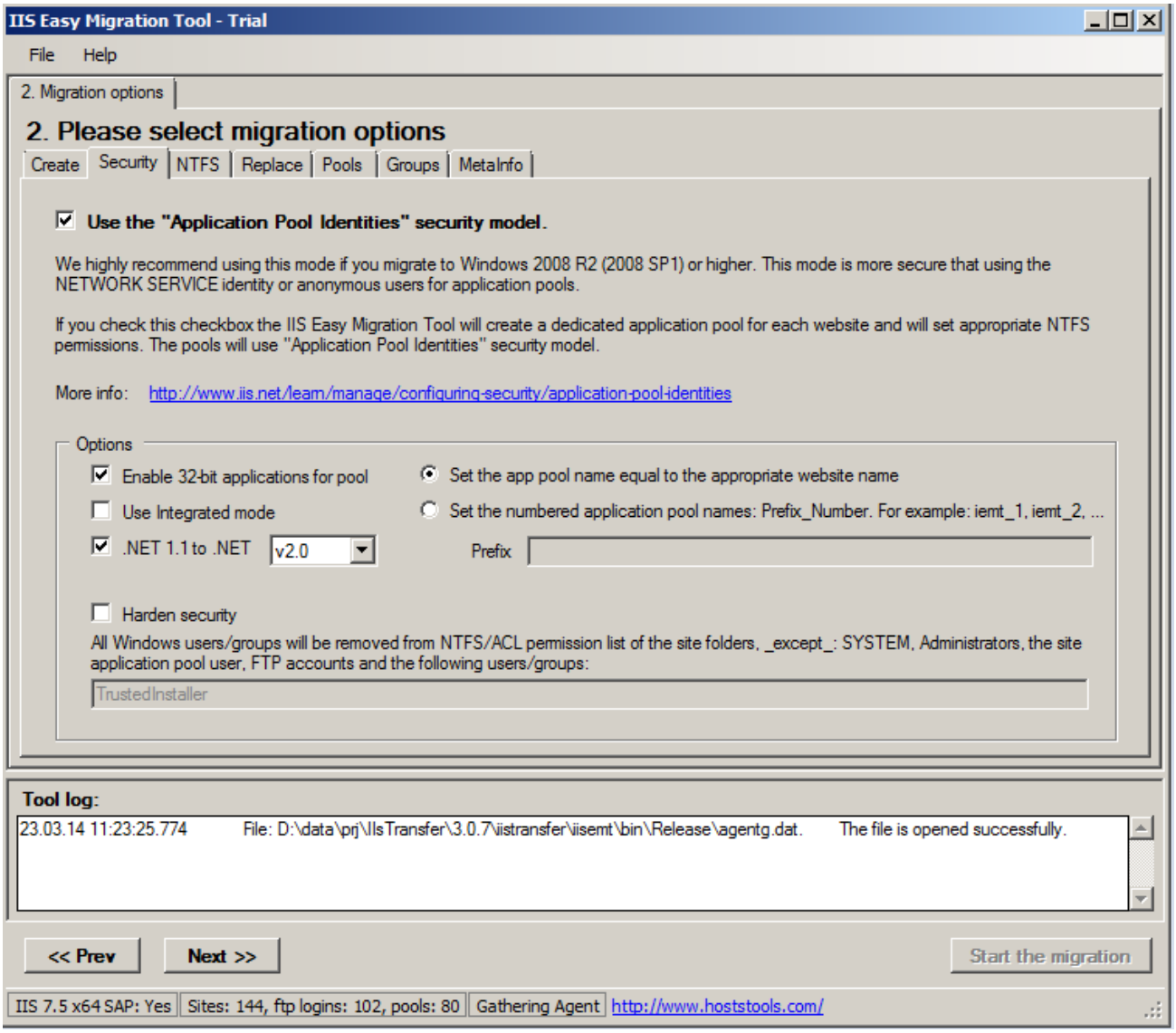
There are several tabs allowing to set/select/tune multiple parameters, such as:

On the ***Create*** tab:

- Should IEMT create web sites or not?
- Should IEMT create application pools or not?
- Should IEMT create FTP accounts or not?
- Should IEMT migrate SSL certificates or not? *This option is only available when Gathering Agent data is used.*
- Should IEMT create Windows users (and groups) or not? *This option is only available when Gathering Agent data is used.*

In ***Except site folders*** list you can select those folders that should not be created. The ***Default*** button resets the list.

The ***Security*** tab helps to improve the server security by using the modern ***"Application Pool Identities"*** security model.



*Note! The **Security** and **Pools** tabs are mutually exclusive. If you use one of them, another one will be disabled automatically.*

If you enable the ***"Application Pool Identities"*** security model the IEMT will create a dedicated application pool for each web site and application. You can tune the dedicated pools properties with the ***Options*** group:

- ***Set the app pool name equal to the appropriate website name*** — The dedicated pool name will be the same as the site name. E.g. "MyFunnySite.com" website will be placed to a new dedicated pool named "MyFunnySite.com". If the pool with that name already exists, the site will be placed to that existing pool. For virtual directories the pool name contains the site name and the dir name separated by dash. E.g. "MyFunnySite.com/images" virtual directory will have "MyFunnySite.com-images" dedicated pool.
- ***Set the numbered application pool names*** — The new pool names will begin with a word specified in the ***Prefix*** field and end with a unique number (GUID). For example, if you set

the ***Prefix***: *NewPools*, one of the pool names can be *NewPools_19195a5b6da011d0afd300c04fd930c9*

- ***Enable 32-bit applications for pool*** — Turn this on if you wish to allow 32-bit applications in these pools.
- ***Use Integrated mode*** — Enable "Integrated" .NET Framework mode. The default mode is "Classic".
- ***.NET 1.1 to .NET [2.0 or 4.0]*** — If the pool has 1.1 .NET Framework version on the source server it will be changed on the destination server to 2.0 or 4.0 by your choice. But if this checkbox is off, the version stays the same (1.1).

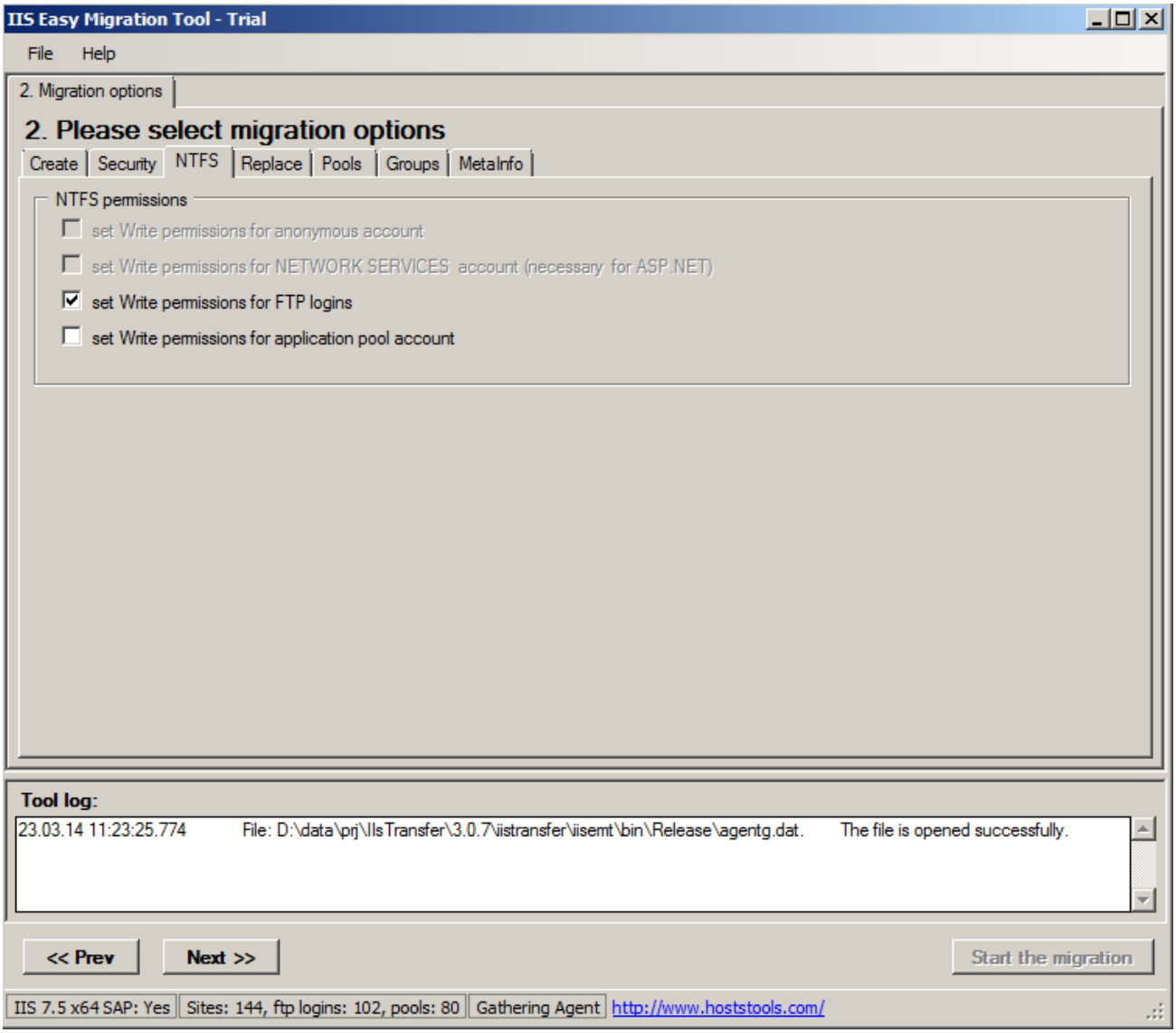
IMPORTANT!!!

*Use the **Harden security** option at your own risk! Test it on some test server and sites first!*

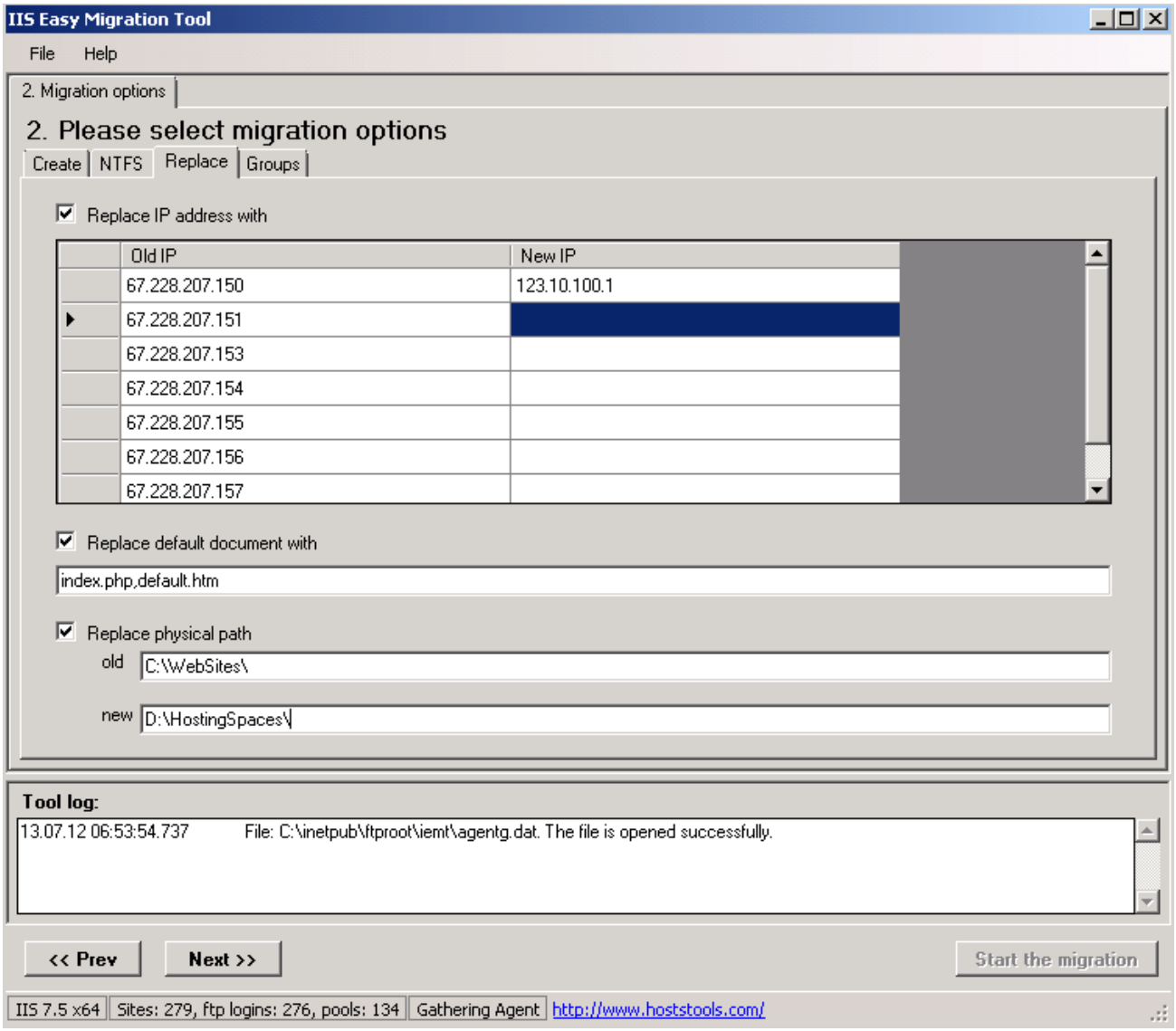
If the ***Harden security*** checkbox is on, the IEMT will **remove** all the NTFS/ACL permissions from the migrated site folders (including inheritable permissions). Then the following permissions will be assigned:

- FTP login(s) associated with this site/dir
- IIS Application Pool of this site
- SYSTEM user and Administrators group
- The users and groups specified in the text field under Harden security checkbox. The list should be comma-separated. For example: *TrustedInstaller,MyLogins,SharePointGroup*

*If you want to use the **Harden security** feature, we recommend doing that when the folders are empty (if possible). If there are lots of files, the process may take lots of time.*



NTFS tab allows to select the permissions for site and FTP folders. Also you can set Write permissions for Application Pool account if ***Application Pool Identities*** security model was selected on ***Security*** tab.



Replace tab is for several different replacement options:

- IEMT can replace old ***IP addresses*** (in the IIS sites properties, host headers, …) with the new ones. At this tab you can see the list of the old IP addresses found in GA data (or Metabase.XML). Specify the new IP addresses if needed.
- The ***Default Documents*** can also be changed. Use a comma to separate the document names.
- The site ***Physical path*** can also be changed.

  To replace some static path with another one just put the old path to the ***old*** field and the new path to the ***new*** field. It is straightforward.

  For example:

  old: C:\WebSites\

  new: D:\HostingAccounts\

  For more sophisticated cases you can use ***%p0%***, ***%p1%***, ... , ***%pN%*** variables to construct the new path using the parts of the old path. The IEMT splits the old path by "\" symbols. The first part of the path is ***%p0%***, the second part is ***%p1%*** and so on.

For example:

Let's say your old IIS server has the websites in C:\WebSites\ folder and there is the following pattern in their root directories:

C:\WebSites\[User_Name_Here]\[Domain_Name_Here]\

(e.g. C:\WebSites\Abby\handmadesoap.com\ or C:\WebSites\Jane\artshop.com\)

And on the new server you want them to be in D:\HostingAccounts\ (instead of C:\WebSites\) and also move the root dir. of each website to "wwwroot" folder.

In this case you should fill the fields this way:

old: C:\WebSites\

new: D:\HostingAccounts\%p1%\%p2%\wwwroot\

IEMT parses "C:\WebSites\Abby\handmadesoap.com\" path and assigns:

%p0% = "WebSites", %p1% = "Abby", %p2% = "handmadesoap.com".

Then it generates the new path using your formula:

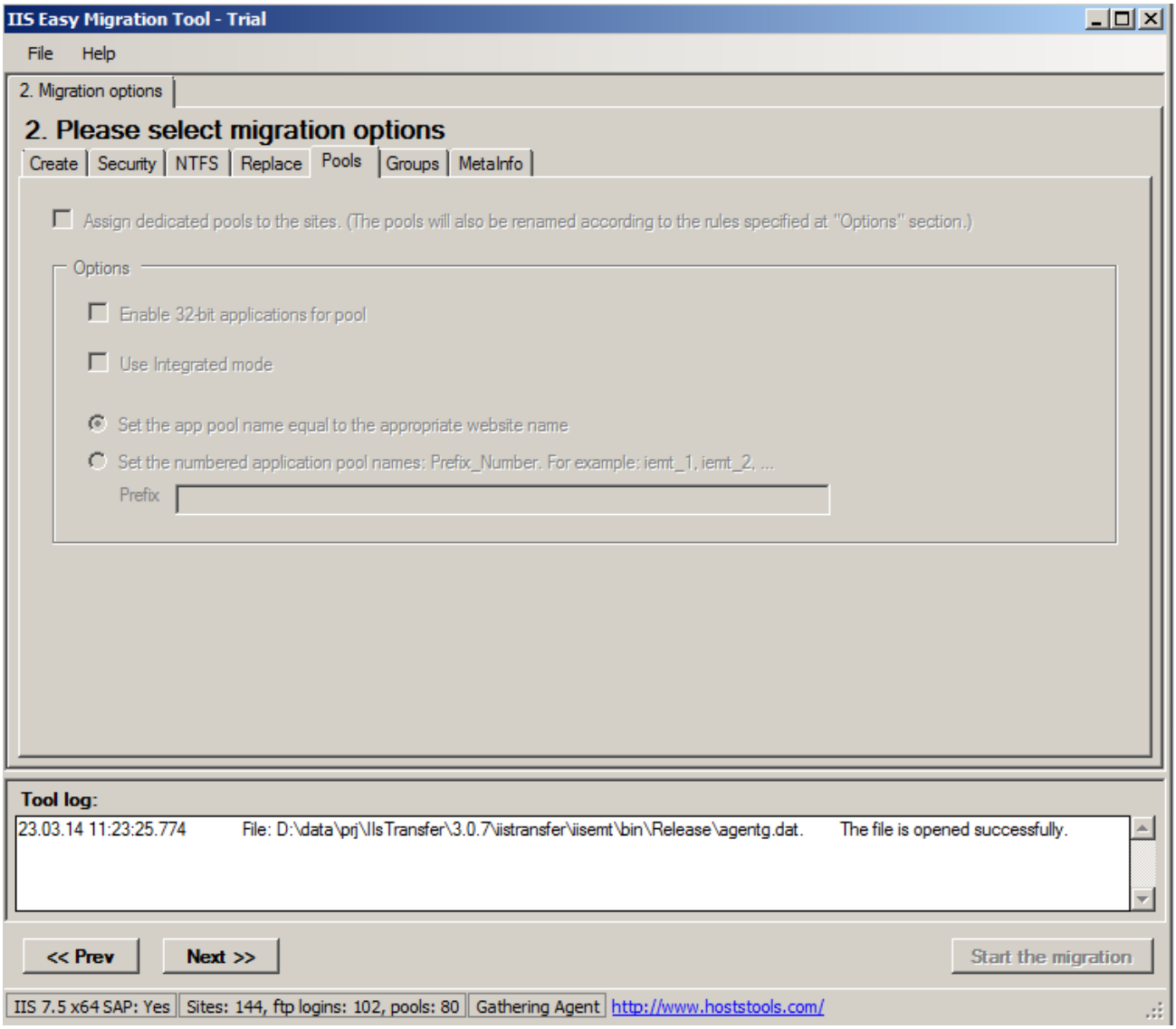
D:\HostingAccounts\Abby\handmadesoap.com\wwwroot\

IEMT parses "C:\WebSites\Jane\artshop.com\" path and assigns:

%p0% = "WebSites", %p1% = "Jane", %p2% = "artshop.com".

Then it generates the new path using your formula:

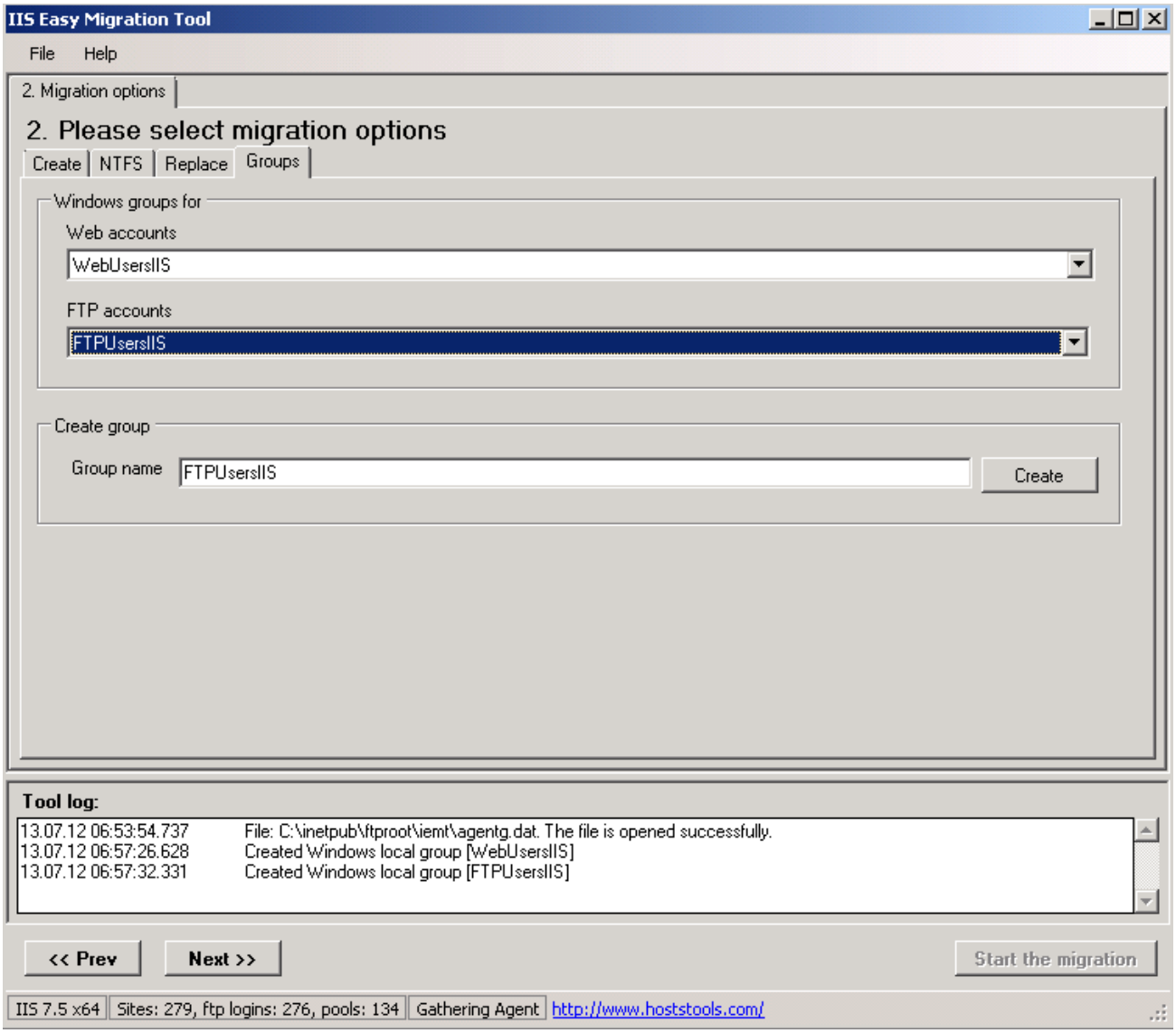
D:\HostingAccounts\Jane\artshop.com\wwwroot\



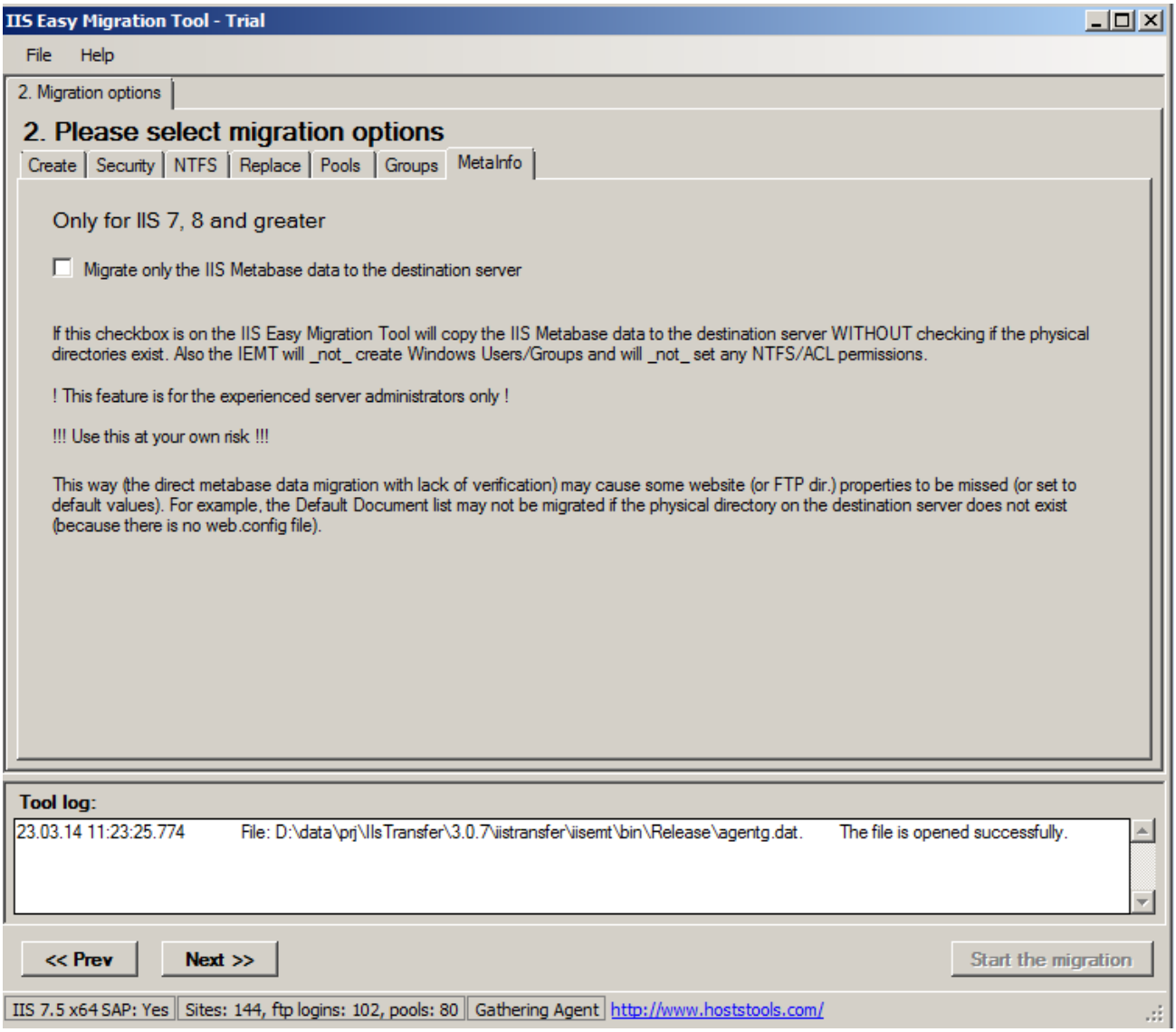
With the controls of the ***Pools*** tab you can create dedicated application pools for each web site (and virtual directory).

> *To enable the **Pools** tab you can turn off **Use the Application Pool Identities** checkbox on **Security** tab. These tabs are mutually exclusive.*

The fields/controls on this tab are similar to the ones on the ***Security*** tab. Look at the ***Security*** tab description for more info, please.



Groups tab is for selecting of groups for FTP accounts and anonymous web users. It is also possible to create a Windows group directly from this tab, just use ***Create*** button after specifying the group name.

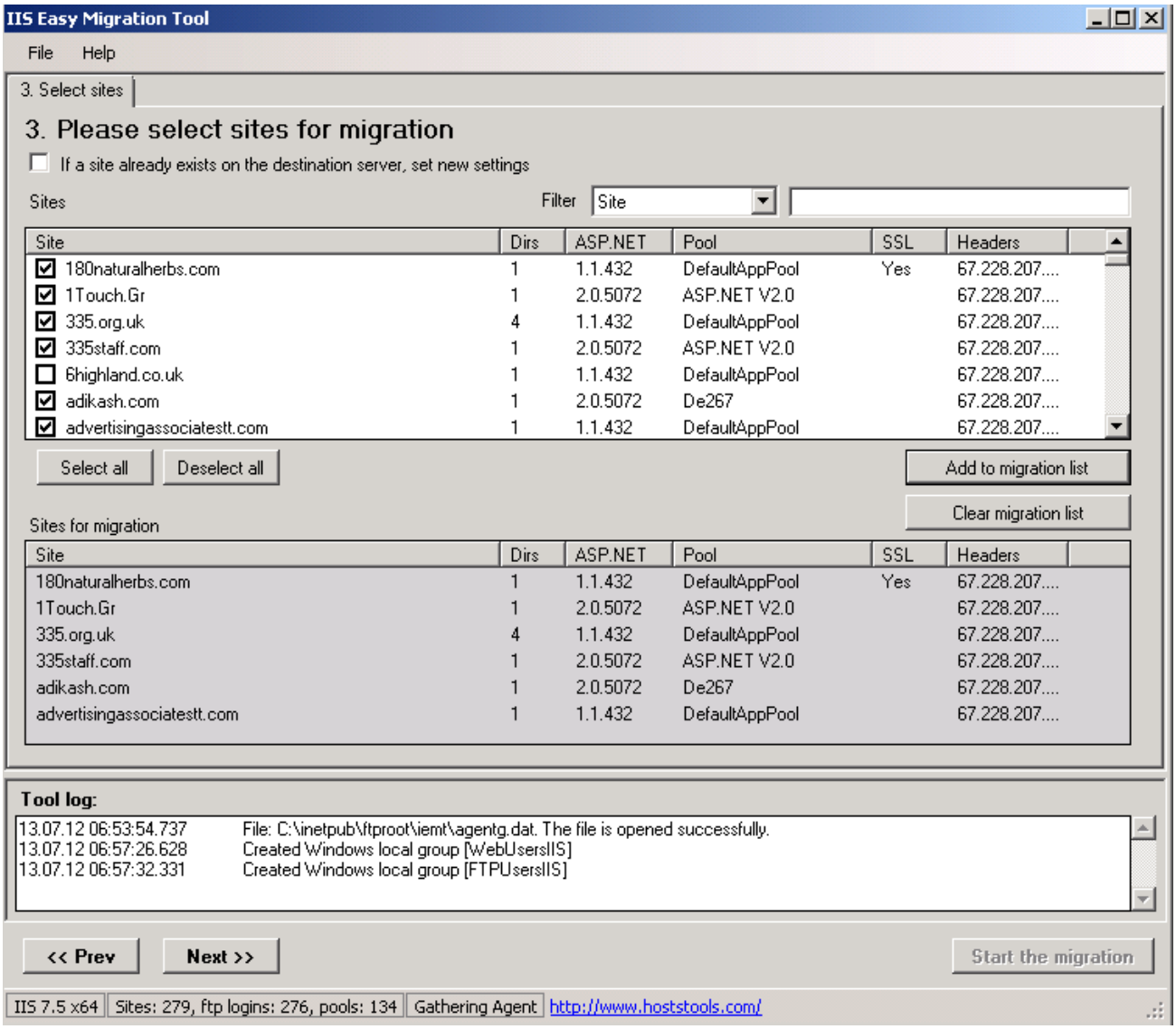


The ***MetaInfo*** tab allows to enable "*IIS metadata migration only*" mode. In this mode the IEMT copies the sites properties from the source server, but does not create any folders and/or users.

Please read the text on this tab attentively.

Click ***Next*** button to go to the next step.

8. Now you can select the web sites to be migrated. If you need them all, just click ***Select all*** button.

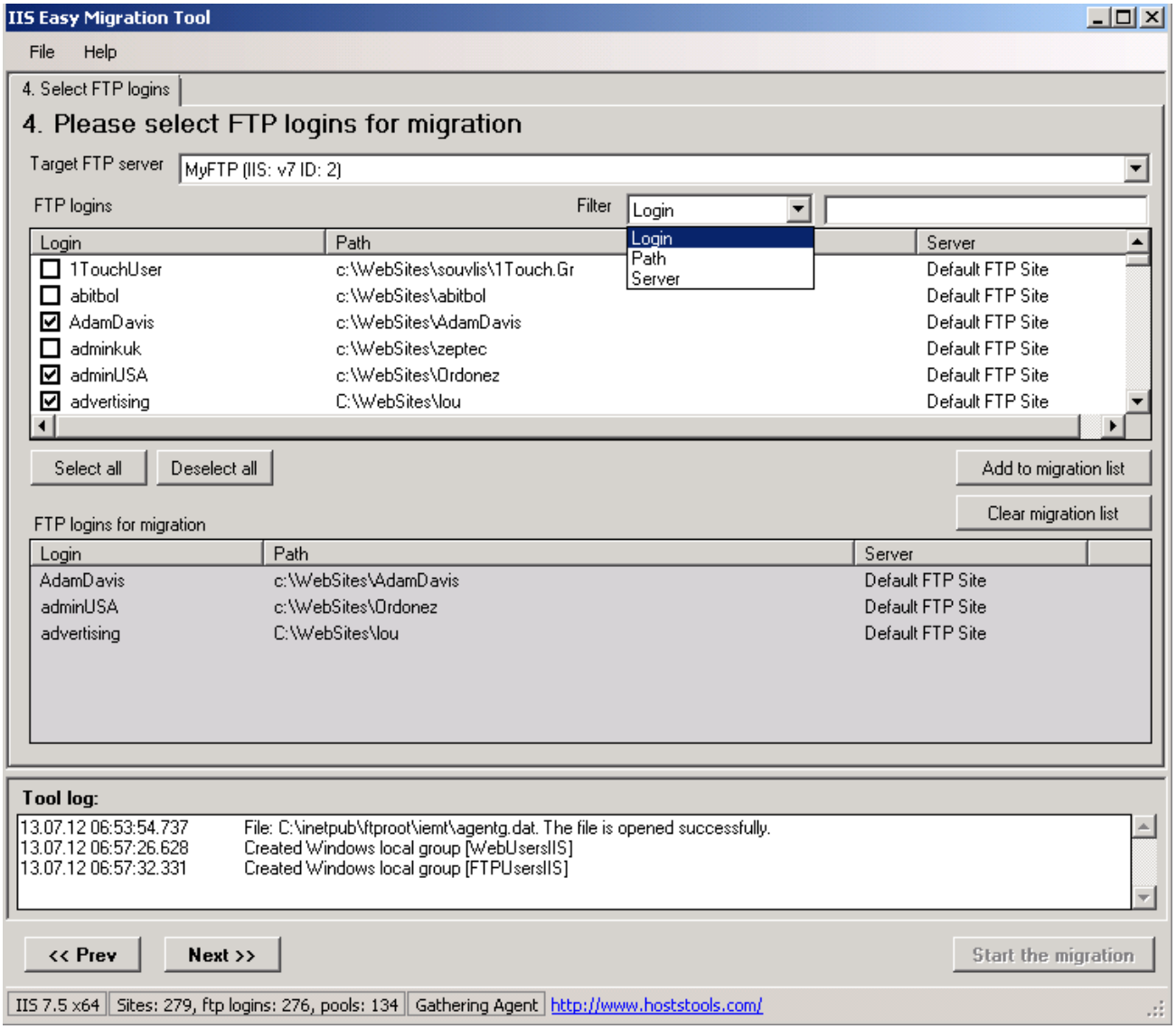


9. Select a site or several sites and click ***Add to migration list*** button. Repeat this as many times as you need. Use ***Filter*** fields to find sites by different criteria.

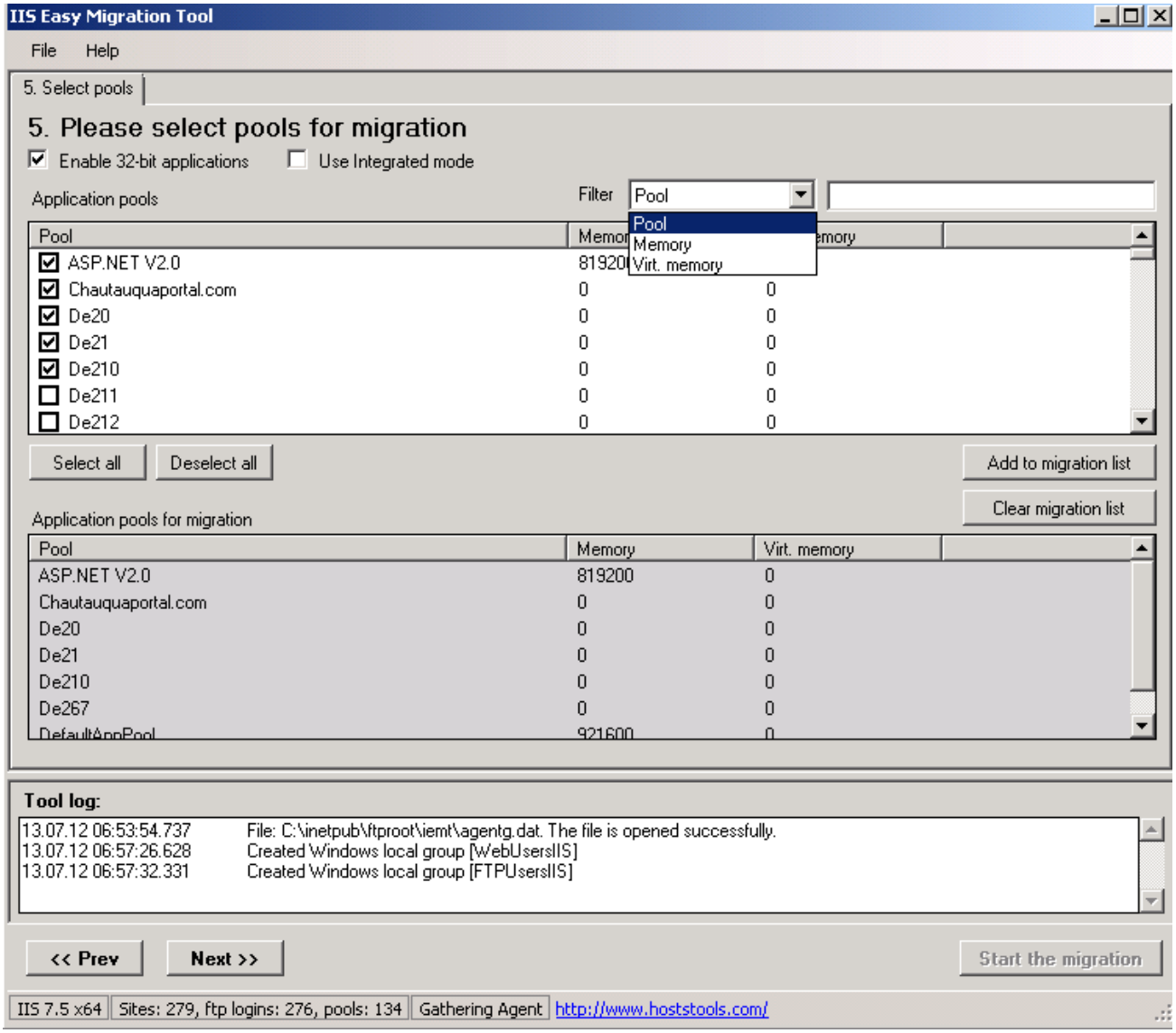
Please note that IEMT will add all the application pools assigned to the selected sites to the migration list automatically.

10. There is also ***If a site already exists on the destination server set new settings*** checkbox. Turn it on if needed. If it is on the IEMT will check if the site exists on the destination server, and if it exists its properties will be updated according to the data from the source server. If a site exists on the destination server, but the checkbox is off, IEMT will not change its properties.
11. By default the IEMT converts IIS 6 Web Directories to IIS 7/8 Virtual Directories. If you need to convert IIS 6 Web Directories to usual folders – turn on ***IISWebDirectory as simple folder*** checkbox in this window.

12. Before going to the next step, think if all is selected correctly. If not, you can click ***Clear migration list*** and repeat the steps 9 to 11 again.
13. Click ***Next*** button to go to the next step.



14. ***Select FTP logins*** tab is for FTP accounts migration. It is similar to the steps 9 to 12, just select the accounts and add them to the migration list by using the checkboxes, filters and ***Add to migration list*** button.
15. Select the destination FTP server name in ***Target FTP server*** list.
16. Click ***Next*** button to go to the next step.



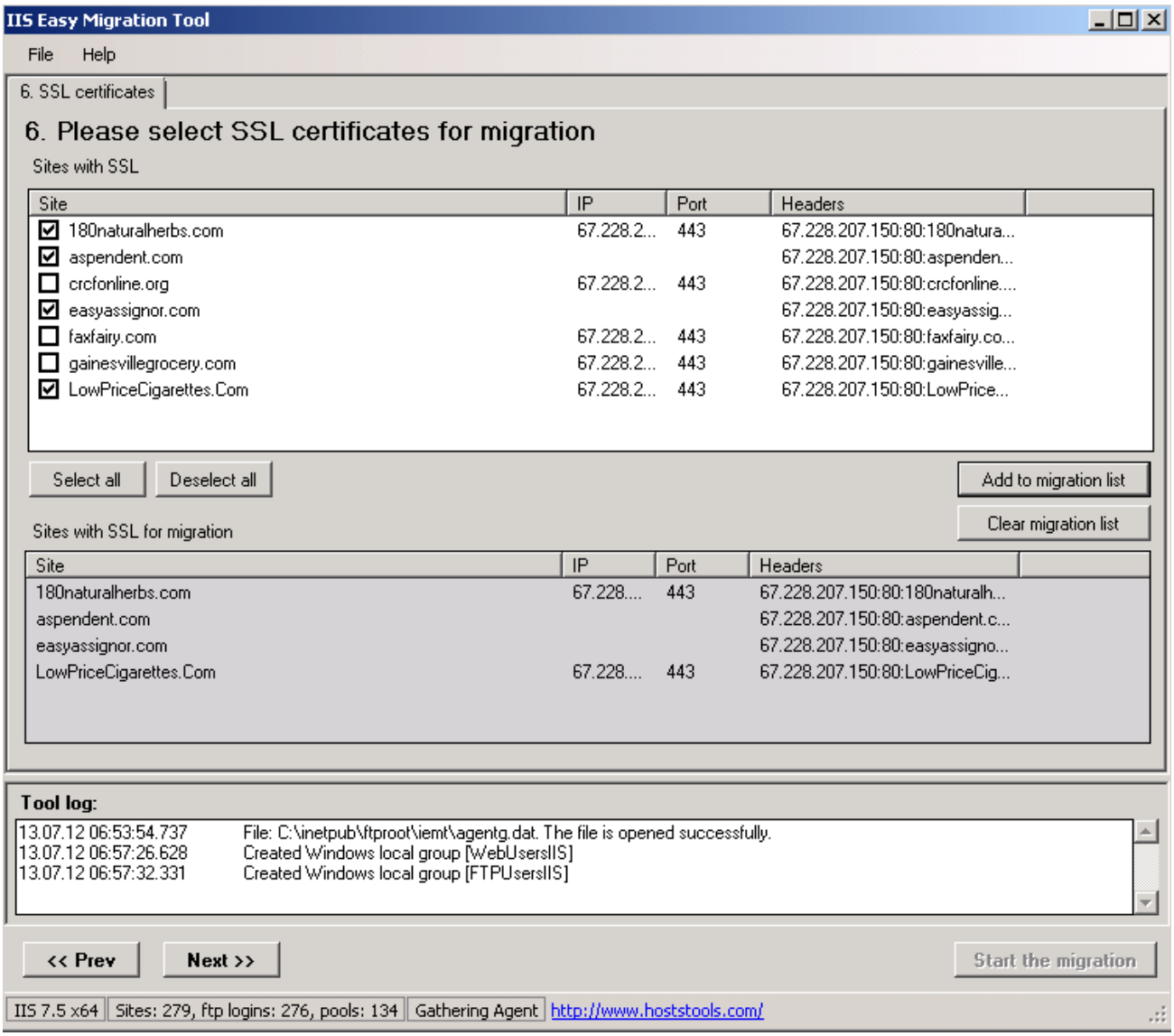
17. ***Select pools tab*** is for Application Pools migration. It is similar to the steps 9 to 12, just select the pools and add them to the migration list by using the checkboxes, filters and ***Add to migration list*** button.

Some of the pools will be added to the migration list automatically. These pools are assigned to the sites you selected at the previous steps. So, they cannot be removed from the list directly. To remove such a pool you need to go back to the sites selection step and remove the associated site from the migration list.

18. Turn ***Enable 32-bit applications*** checkbox on to enable 32-bit applications. This option is available for IIS 7.0/7.5/8.0 x64 only. This is a global parameter, it will be applied for all sites migrated during this session.
19. Turn ***Use Integrated mode*** checkbox on to enable Integrated mode. The default mode is Classic. This is a global parameter, it will be applied for all sites migrated during this session.

IEMT detects the .NET framework version for each pool automatically at the sites selection step.

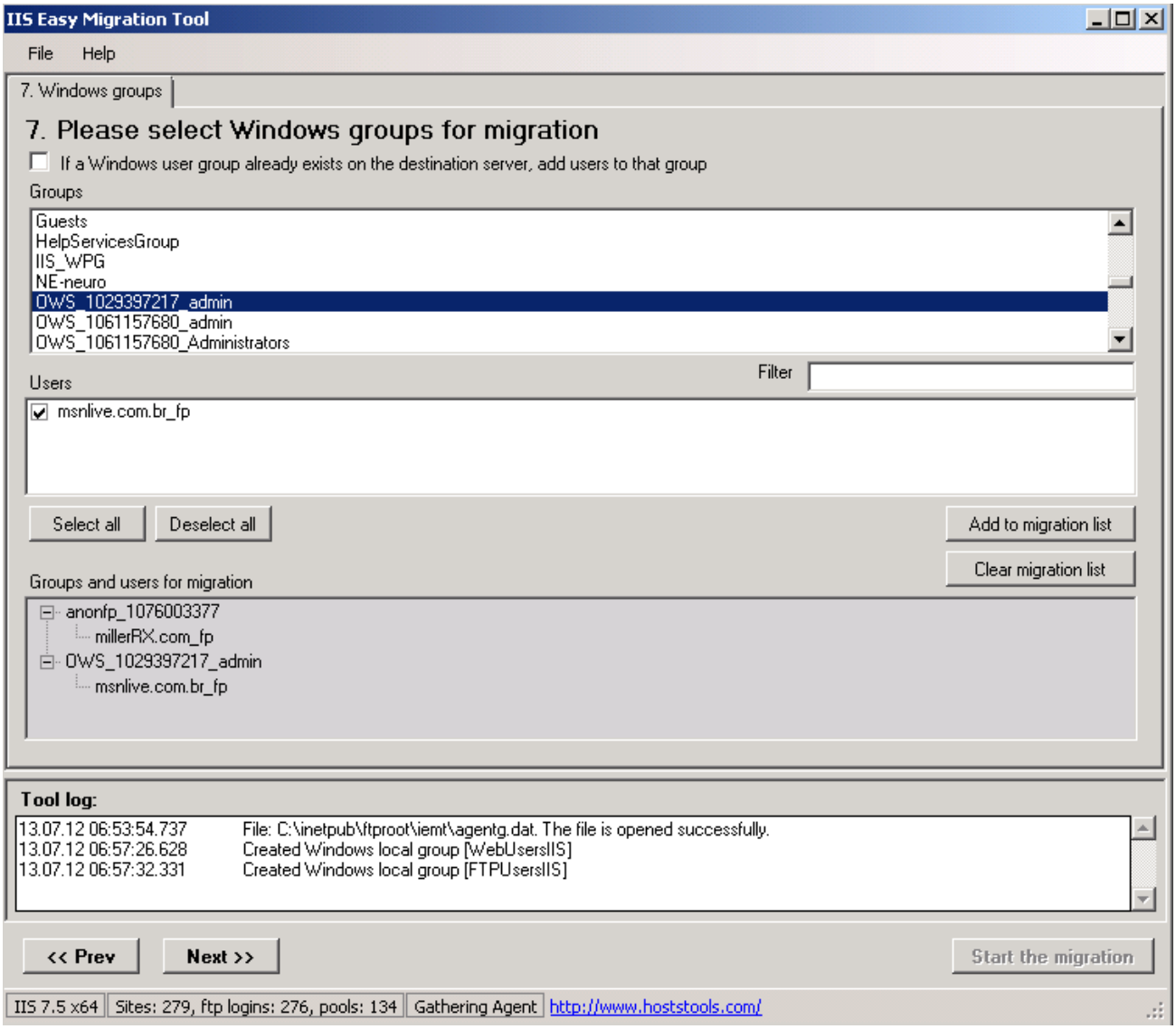
20. Click ***Next*** button to go to the next step.



21. ***SSL certificates*** tab is for SSL certificates migration.

This step is available only if Gathering Agent was used for source data collection.

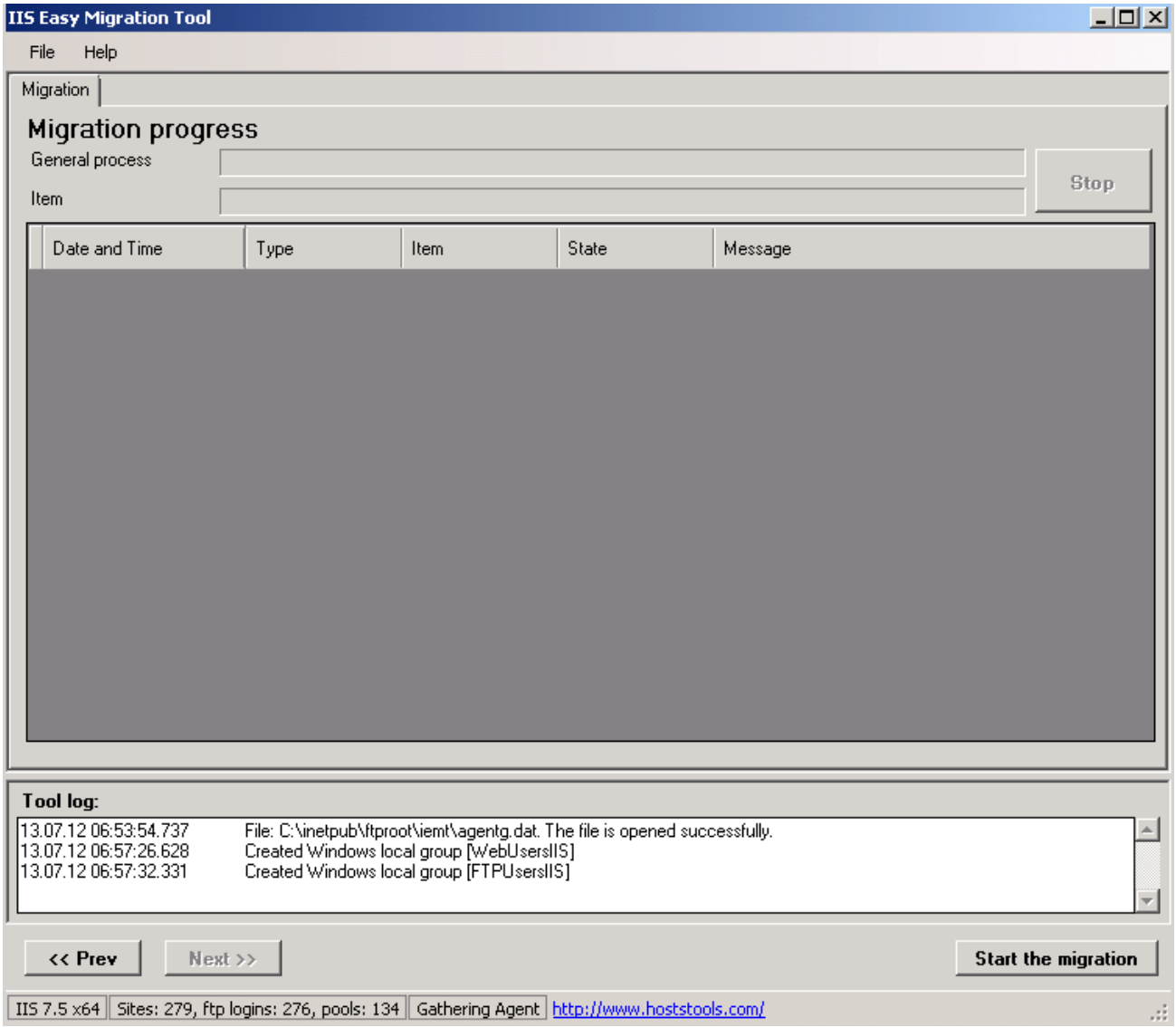
22. Click ***Next*** button to go to the next step.



23. ***Windows groups*** tab is for Windows users and groups migration.

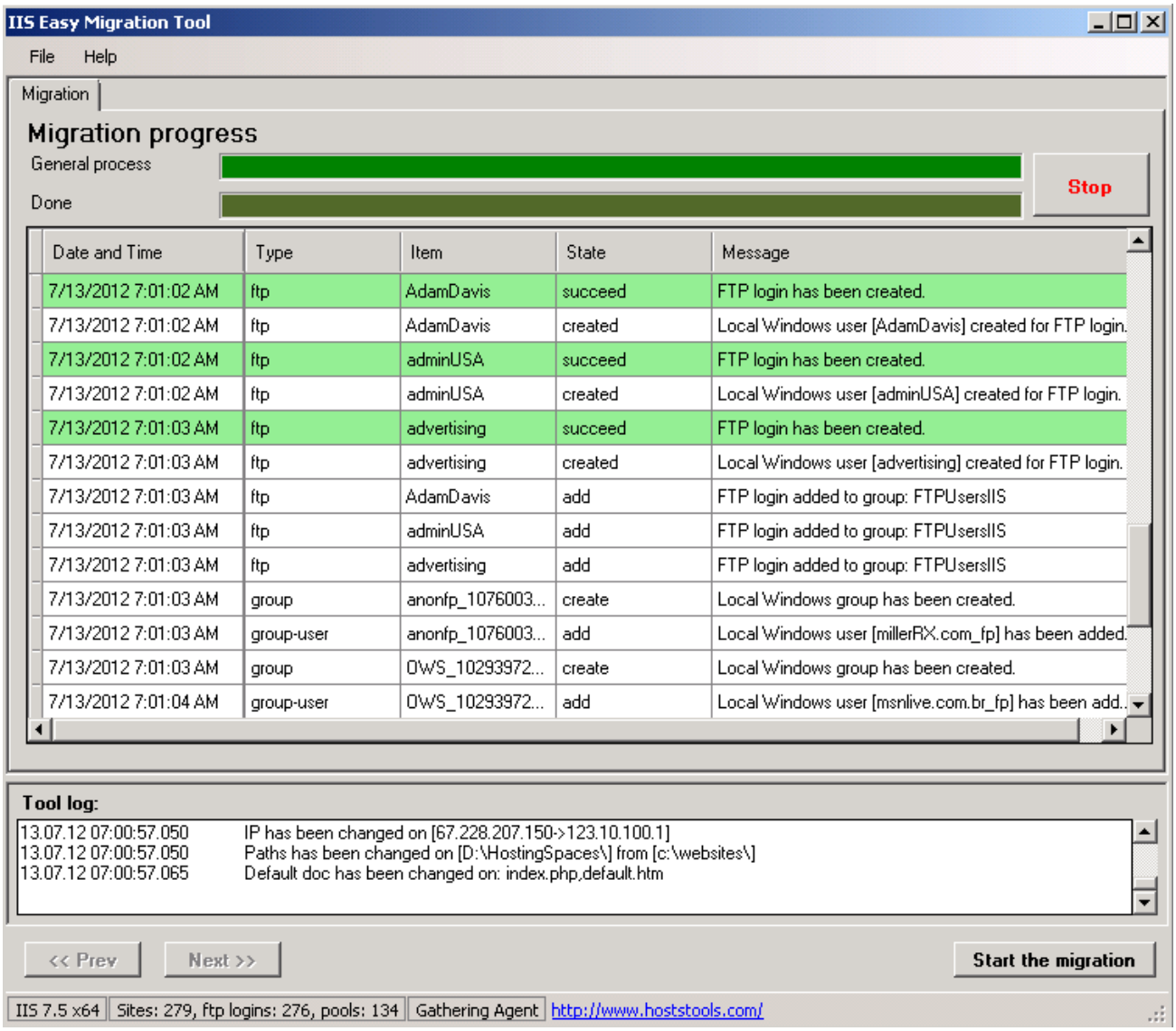
This step is available only if Gathering Agent was used for source data collection.

24. There is ***If a Windows user group already exists on the destination server, add users to that group*** checkbox. If it is on, the IEMT will create users and then add them to appropriate groups, even if the groups (or some of them) existed before this migration session. If the checkbox is off, the IEMT will not add users to those groups which existed before this session (the old groups will be "untouchable").
25. Click ***Next*** button to go to the next step.



26. The final step. You are about to start the migration process. But before you click the ***Start the migration*** button you have a chance to go back (using the ***Prev*** button) to change the settings. If all is fine with the settings, click ***Start the migration*** button.

*It is possible to stop the migration process at any moment by **Stop** button. But in this case there is a possibility that some things will be wrong. Currently we know only one type of error cause by the migration break (the password of an anonymous user does not match the password specified in the web site properties), but there may be other errors too, unfortunately. So, it is not recommended to stop the migration process.*



At the end of the migration process IIS Easy Migration Tool creates NUMBER-USERS-PWD.TXT file and saves all the passwords of the newly created users in the following format:

[User type] User_name Password

Troubleshooting

*Note: The IEMT is a GUI application, so currently it is not compatible with Server Core installation of Windows. You should either have **Full Installation** of Windows 2008, 2012 or Windows Server 2016 with **Desktop Experience**.*

If any troubles, first of all, please take a look at the migration log. In most cases it helps to find and fix the problem. It is also a good idea to check the server Event Logs.

Also be sure you run the software **as Administrator** (you must be a member of the local Administrators group.)

And of course, you can contact support@hoststools.com for support. If you decide to contact HostTools support team, please send us all the logs and agentg.dat (or metabase.xml) file.

Thank you for using our software!