

IT Administrator

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Special Edition for FastTrack Software



Tested:

FastTrack Automation Studio



Under Test: FastTrack Automation Studio **Faster than the rest**

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Source: vasilkovv - 123RF

Once properly mastered and applied, scripts can make life considerably easier for administrators. This is exactly what Danish software company FastTrack Software has set out to do with its Automation Studio solution and script language FastTrack. Tasks should be completed faster than with batch scripts, the PowerShell, or VBScript. IT-Administrator has set out to see whether the scripting environment really delivers what the vendor claims.

FastTrack essentially consists of the script interpreter *fsh.exe* as well as Automation Studio. It is a development environment that packages scripts for installation and autonomous execution in EXE and MSI files. The vendor is addressing a wide range of tasks in the everyday life of an administrator, such as logon scripts for users as well as user and group management in the Active Directory. Other potential applications include notebook backups, client inventorying, distribution of Outlook signatures for all users as well as user-friendly actions based on a language spanning more than 1,200 commands.

Installation without options

For the purpose of our test we used FastTrack Automation Studio Version 8.7.5. We installed the package on a Windows Server 2008 R2, which was a member of our Active Directory domain. The setup was complete with just a few clicks and offered no selection options apart from the target directory. We accepted the default path, ran the installation through to the end, and started Automation Studio via the shortcut on the desktop.

The application looked for the license information the first time it started up. The option of registering for a free one-month trial was offered. Because we had a license for the Platinum Edition, we decided al-

ternatively for the option "I have a license file". While Automation Studio can also be used in user mode with restricted rights, the license prompt required admin rights as the license file is copied to the program directory. Last but not least we had to accept the license terms and conditions. We were then able to choose in the start dialog between the modes "App Factory" or "Scripting Mode". The latter is the full editor, which offers access to all functions.

Quick access with App Factory

"App Factory" mode provides simpler access, offering seven typical FastTrack functions for wizard-based execution (Illustration 1). By selecting "Signatures / Design Outlook Signature" we located a WYSIWYG editor, which allowed us to create an e-mail signature. Apart from popular text formatting options and the possibility of embedding images and links, we were also able to use typical Active Directory attributes here as variables. For example the string "[UserFullName]" is replaced later by the name in the context of the executing user.

25 additional attributes were also offered, which we found in the editor by selecting the "AD User Property" button. This is the information found in the properties of an AD user on the "General", "Address", "Telephones", and "Organization"

tabs. We found some additional features of the user account among the more than 400 functions offered with the "FastTrack Function" button, although not all possible attributes of an AD user object were available. User-defined fields, such as the "extensionAttributes" in Exchange, could not be used.

Once we had saved our signature, we were able to create an MSI or alternatively EXE package with the "Build App" button. The first package is suitable for distribution based on group policies or for software distribution. The latter can be used in any logon scripts or for manual execution. We opted for an EXE file, which produced the desired result in the context of domain users and set up a signature in Outlook. However this only worked for users who already had an Outlook profile at the time of execution. In the case of new users, we had to first configure Outlook before we could create the signature.

Client management with inventorying

The "Inventory" function, which integrates the "SkyBox" cloud service, is used for managing clients. The latter is available separately [1], although access to this online platform for saving and managing inventory data is included automatically in the FastTrack licenses. However because we did not want to entrust



our inventory data to the cloud, we decided initially for the "Set Up Local Inventory Server" option. In preparation we first installed the Express version of SQL Server 2012 on the local system. It then took just a few mouse clicks to complete the setup of the inventory server. The wizard consequently generated the database as well as the files required for the inventory server's web interface.



Illustration 1: The App Factory is a wizard-driven solution for creating scripts for some typical tasks.

The setting up of the associated web server was a little more complicated however, as the otherwise detailed FastTrack [2] documentation was somewhat vague in this respect. However we promptly received the necessary detailed information by contacting FastTrack Support. We then installed the IIS role including ASP.NET and .NET-Framework 3.5.1 as well as the still up-to-date .NET-Framework 4.5.1. We created a new application directory in the IIS Manager under the Default Web Site and copied the FastTrack files to this directory.

We had to update the associated application pool afterwards to .NET Framework Version 4.0 and set up a user with access rights to the database. We were then able to open the interface in the browser and sign on with the password assigned in the wizard. This password is provided in unencrypted form in the *web.config* file however and is the sole master password. Granular assignment of rights so that admins can only perform administration on specific clients is not possible accordingly. Everyone can see all data recorded in the inventory.

Back in the App Factory we were able to generate a tool with the "Build Inventory Client" action, which recorded a computer's data and sent it to the server. Packaged as an MSI setup, the tool created a planned task, which sent data regularly. An EXE file was used for the one-time execution. We were able to apply both successfully in the test. We then found our client data in the web frontend again (Illustration 2).

The inventory recorded data on the hardware configuration of the clients and the software installed on the clients. The "Client View" page took us to an overview of each device, which however also identified the specific user account from which the data was transmitted. Moreover, the inventory indicated the geographical location based on the public IP address of the client. The data protection officer is to be consulted accordingly prior to use in the company.

Filtered display

The "SoftwareView" filters on the basis of the specific application and its version and indicates the client on which this application is installed. The "Client Overview" uses pie charts to visualize the frequency of identified device vendors, the types of terminals according to desktops and notebooks, the distribution of the operating systems, as well as the distribution according to 32 and 64 bit platforms. The "Software Overview" lists how often each application is installed. In this way the inventory helps to provide an overview of the client landscape and therefore covers the basic requirement in case central software distribution is not otherwise deployed.

The App Factory likewise provides a wizard for creating a startup environment for logon scripts with the "Logon Script" option. It is possible optionally in this case to display an individual graphic in a splash screen. The "Icon file path" field was already preassigned automatically with the path to our netlogon share however. We had to first delete the field in order to

continue without specifying a graphic. We were able to choose in the next dialog step whether FastTrack would create the necessary files automatically on the netlogon share or whether we would copy the files to this location manually.

The wizard pointed out clearly that the *FTLogon.exe* file now had to be defined manually or based on a group policy as a logon script for the required users. This completed the setup and we were able to switch directly

from the last dialog to editor mode as well as retrieve the online documentation at the same time with the instructions for writing our own scripts [3]. We found the FastTrack syntax to be more transparent and easier to learn than Microsoft's PowerShell – the editor in particular provided good support in this regard.

Automation Studio provides a development environment in scripting mode with syntax highlighting, automatic completion, and context-sensitive help. Together with the numerous examples on the vendor's web pages [4] we were able to quickly create our own scripts. This allowed us to connect file shares and printers and to also do this independently of group memberships or location. Likewise we were able to create graphic messages and selection menus, which then in turn initiated FastTrack commands. The functions that App Factory packages in mini applications are also essentially FastTrack scripts, whose code we were also able to embed directly in the logon script.

But back to the App Factory: The "EXE to MSI" function allows setup routines that only exist as EXE files to be repackaged as MSI so that they can be installed unattended based on the group policy or similar methods. The wizard requests a directory and lists all files that it finds there. These can be selected individually for inclusion in the MSI package. The installation command as well as the command line options and, if required, also an un-installation command have to be specified in the next step.



Illustration 2: The Inventory records the hardware and software configuration of the connected clients.

Script-based backup

The "Backup App" option generates a simple tool that can be used to back up a preconfigured path in the context of the executing user. This is useful for notebooks or other clients that need to maintain local data. The wizard expects a source directory. Multiple selection of various paths was not possible in the test at this point. The "Documents" path variable can be selected by default here. If this option is disabled, absolute paths can be specified explicitly. FastTrack functions and variables can also be integrated by selecting the "Add Function" button.

Functions from the "Directories / Logical Paths" group seem to be interesting here. The option is also available for the target path. It can be selected here additionally whether deleted original files are to be retained at the destination location. The next dialog step offered us options for configuring the GUI. The app may issue a query here before the backup starts as well as a progress bar during execution and a final message. The wizard then packaged the selected options in an EXE file, which can be executed manually by the user. Alternatively, the last dialog step contains the relevant commands for further processing in user-defined logon

scripts. It is therefore not absolutely essential to package the backup function in a separate EXE file. Using the relevant code as a template, a number of folders could then also be backed up, which we were not able to do with the wizard. The Backup App worked smoothly in the test.

Another function of the App Factory is the "Thin PC". Wizard support is provided here in turn for developing a reduced user interface. The app replaces Windows Explorer as the default shell and operates a PC in kiosk mode with significantly restricted functionality. The app is configured by means of a graphical editor or using a user-defined script. We decided in favor of the first option. We were then able to compile Thin PC functions and use the "Preview" option to see how the menu would look subsequently. Apart from local programs, the wizard offered us Citrix or RDP sessions as well as individual web pages or browser sessions. We were able to specify different credentials here optionally in the app. If this is not configured, local programs are executed in the context of the logged on user.

Web pages are executed in a window completely without a browser menu. This is useful is a kiosk PC is to act as an access

point for an intranet without prior authentication. The logon dialog for the remote server follows in the case of remote sessions. The "Admin Explorer" and "Admin Control Panel" options also open Windows Explorer and the Control Panel on a Thin Client. Even if the term "Admin" perhaps suggests otherwise, Explorer and the Control Panel are executed in the security context of the logged on user and not with administration rights. The "Change Icon" button provides a total of 32 icons from the FastTrack range for selection. The native icons of local programs or user-defined graphics cannot be incorporated.

Finally, the thin client GUI also offers a FastTrack script, which can be processed in a user context in the next dialog step by switching to scripting mode. We left it at that however in our test and were in turn able to configure a user account optionally in the final step for subsequently logging on automatically to the Thin PC. If the password for this account changes, the app would have to be updated and redistributed. The option nevertheless seems to be useful insofar as a kiosk computer is only used in any case as a thin client and the actual logon is performed on the terminal server.

As the final step the wizard packaged the Thin PC menu in an MSI package. The online documentation provides valuable information regarding this distribution [5]. It is therefore not a good idea to simply install the MSI package manually on a client, since it replaces the Explorer as a shell and there is consequently no way back. The documentation describes the distribution based on the group policy with the settings for the uninstallation. A test computer prepared in this way acted without difficulty as a thin client in the test. Users were still able to gain access to the command line and registry editor however via the Task Manager. FastTrack refers to implementing additional restrictions in this case on the basis of the group policy.

Help Desk App for small environments only

The last option offered by the App Factory likewise leads to a simple wizard-driven "Help Desk App" for managing user ac-



Product

Script language and development environment for computer administration.

Vendor

FastTrack Software
www.fasttrackscript.com

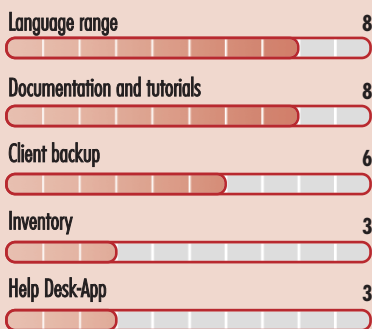
Price

With the license for every 50 clients the Small Business Edition costs 549 US Dollars, the Enterprise Edition on 749 Dollars and the Platinum Edition 999 Dollars.

Technical data

www.it-administrator.com/downloads/datenblaetter

IT-Administrator's rating (max. 10 points)



Details of our test methodology can be found at
www.it-administrator.com/testmethodik

This product is

best suited for small to medium-sized Windows environments in which administration has largely had to be performed manually to date and where little automation exists.

less suited for admins who have already tackled subdomains, such as inventorying or client backup, using a different approach. The other FastTrack functions, such as logon scripts, can still be very useful here.

not suited for large environments with a high level of automation as well as admins with extensive PowerShell expertise who are used to scripting or programming missing functions themselves.

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counts in the Active Directory. Overall ten functions can be added to the app. It is therefore possible to create, delete, activate, and deactivate users again, change the password, unlock the account, and move a user. Group memberships can also be managed. Help Desk employees can check which groups a user is a member of and vice versa which members a particular group has. Users can consequently be added to groups and also removed from groups.

We activated all functions for our test app and were able to choose in the next step whether we wanted to define the rights for an administrative account directly in the app. Both alternatives had advantages and disadvantages. If no account is defined, the app requests the relevant logon information at startup. Windows user account control has to be active for this purpose and the executing user must of course know the admin password. If the account is already contained in the app, Help Desk employees can also manage accounts without knowing the password. Care must be taken of course to ensure that the Help Desk App does not fall into the wrong hands as anyone who has access to the file can then use it. Furthermore, the app has to be regenerated and distributed in this case also if the password of the integrated user changes.

Without further modifications, the app has a number of limitations, which seem to make it only viable for a small Active Directory structure with just a few users and a few OUs. We were always shown a flat list of all users in our AD in the form of selection lists, regardless of the particular OU in which they were located. In addition, we only saw the logon names here. This means that Help Desk employees would soon find it difficult to identify the

right user if abbreviations consisting of first name and last name initial letters are used as is the case with our domain. The app appears to be useful however for smaller environments. User management worked flawlessly in the test.

Conclusion

FastTrack Automation Studio presents itself as a comprehensive toolkit with tools and resources for numerous application scenarios. Scripting mode offers a large number of options from the command set through to simple output of graphical elements, which cannot be realized at all with PowerShell or other solutions or only with a significantly greater level of effort. Individual actions actually only require a single line of code, which can be formulated with the assistance of the context-sensitive help.

There may well be specialized products with a much broader range of functions for individual App Factory options, such as inventorying or backup. But anyone wanting to tackle the many hurdles in everyday admin and especially anyone for whom logon scripts and client automation is a priority will benefit from the variety of functions offered by FastTrack. (dr) **IT**

- [1] SkyBox cloud service
E8P12
- [2] FastTrack documentation
E8P11
- [3] Online documentation for creating own scripts
E8P13
- [4] Top 10 sample scripts
E8P14
- [5] Online documentation for Thin PC distribution
E8P15

Link codes

