



Product Review

Systancia AppliDis

December 2016



Introduction

Systancia

Several years ago there were numerous products on the market offering a Server Based Computing (SBC) solution. VDI was introduced and even more products became available. However, in the last years many of these products are not here anymore. In the current landscape the big three dominating this market are: Microsoft RDS, VMware Horizon View and Citrix XenApp/XenDesktop. However, now another player is coming to the stage; Systancia. They have already been in the market for years, but were working in a kind of stealth mode in their home country France.

In this review I'm going to be taking a look at their flagship product, AppliDis. Let's start with a quick infrastructure overview of the product, before we are going to start the installation.

AppliDis Components

The AppliDis infrastructure workspace exists of different roles, which can be combined or installed separately over several machines.





The heart of the AppliDis infrastructure is the Administration server. Via this server the configuration is made and all other components are communicating via the Administration Server. The administration server stores the configuration into a database. The database can be a SQL or Oracle database, where Microsoft SQL Express is supported. AppliDis has the option to configure a back-up database on a different database server for fail-over/disaster purposes. This is also possible with using MS SQL express, so you don't have any additional license costs. To access the environment users are connecting via Web Portal Server. This role is often combined with the Administration server (as both are based on Internet Information Services). The actual user sessions (Desktop or Application) are running on the Application Servers, within AppliDis this is also called standard VDI. These servers are based on the RDS Session Hosts. AppliDis also has a feature called Extended VDI. The Extended VDI is based on the Virtual Machines Hosts. Within the Virtual Machines hosts the management component of the HyperVisor (VMware, Hyper-V and Nutanix currently supported) layer, where AppliDis uses the Hypervisor capabilities to use cloning techniques so quickly build up additional VDI's. The extended VDI is available for Client OS operating systems only. Personally it would be nice if the technique will be available for Server OS operating systems as well, like competitors as VMware and Citrix have. Systancia is known of such request and this feature is already on the roadmap.

The last component are the Gateway servers. This is a legacy component to offer remote access from outside the company. You can compare it with the Citrix Secure Gateway, both on functionality as the way of working. Nowadays Systancia have a Linux based appliance called IPDiva (which is out of scope for this review).

Systancia also offers their own Thin Client Solution, which is available within the product administration console as identified client workstations. I personally think it's cool that a manufacture delivers all components of the whole solution. It will guarantee that the combination will be working fine, while of other solutions this are sometimes painful activities. For this review we did not use their Thin Client solution, so I cannot share my experiences of this part of the product suite.

Installation

The installation of Systancia AppliDis starts with preparing the machines for the actual AppliDis installation. The prerequisites are pretty large list containing of adding roles and features, but also several settings on the machines themselves. Happily most of these configurations can be done via MS GPO's as well (but that is not mentioned in the installation guide).



The (manual) steps are described nicely in the QuickStartGuide, but in the current days you expect that installers are automatically installing the required prerequisites. Systancia mentioned already that in the upcoming version, this part will be simplified using Virtual Lab feature. You also need to configure several settings that can lead to discussions on the security standpoint in larger companies. It would be better if there was described why this setting is required or what the consequences are.

After you have arranged that all prerequisites and the database platform are in place we can start the actual installation. The installation steps are starting with installing the first administration server. The installation wizard check the prerequisites (and can even try to fulfill the prerequisites). Just as almost every installation wizard the standard screens like the license agreement, customer information and destination location are logically shown. During the wizard you specify the type of database (Oracle or Microsoft SQL), followed by providing the database information as shown in below figure. Remarkable that you need to use SQL authentication for this part, this can become an issue at some organizations.

The screenshot shows the 'InstallShield Wizard - AppliDis 5.0 Fusion' window. The title bar is blue with a red close button. The main window has a light blue header with the text 'Database server' and a subtitle 'Enter database server and authentication details'. Below this, there is a text box for 'Database Server' containing 'vbn-srv170\sqlexpress'. To the right of this text box is a yellow folder icon. Below the text box, there is a note: 'Server name\Named_instance' and 'Note: The named instance for SQL Server Express database is SQLEXPRESS'. Below this, there is a 'Search' button and a text box containing 'C:\Program Files\Microsoft SQL Server\MSSQL12.SQLEXPRESS\MSSQL\Data'. Below this, there is a 'Database name' text box containing 'SqlApplidisBase5'. Below this, there is an 'SQL account' text box containing 'sa' and a 'Test' button. Below this, there is a 'Password' text box with masked characters. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'InstallShield' logo is visible in the bottom left corner.

After specifying the database, the software installation takes place. Dependent of the situation there can be hotfix installations available, that should be installed afterwards.



The Administration Server is the only component that is installed using default installation methods. All other components are installed out of the AppliDis Management Console (HTML5), so you can start from any browser with supports HTML5.

In the console you go to the infrastructure tab, which shows the AppliDis infrastructure. There you select the component which you would like to be added. A server list shows up and you can add a server. Next you need to search for the server and drag in the right side. The software automatically detects which prerequisites are fulfilled and based on those a role can be installed on this machine. In this way you can add additional administration servers, web portal servers and/or application servers (RDS Session Hosts).

New servers

Select and drag the servers to be added to the right area (configuration area)

Search: vbn-srv17

Name
VBN-SRV172
VBN-SRV173

Select all Search

Insert a server:

Add

Portal: ☐ Applications: ☐ Gateway: ☐ Administration: ☐

VBN-SRV173 (Windows Server 2012R2)

Administration server and broker connection: ☐

User web portal server: ☐

Applications host server and standard VDI desktops: ☒

Gateway server: ☐

Start Close



Via this method you can add as many machines with the components you need. If needed you add servers to a server group to make configuration option later on a bit simpler.

Publishing


After adding one or more application servers we are ready to set-up a desktop and/or applications to offer to the end user. This is done via the Publication workspace in the AppliDis Management Console. Publishing is based on three steps. On the first step you create/configure a desktop and/or applications. The desktop is set-up automatically and the application servers are already added. Logically you can remove application servers as needed and create multiple desktops as needed. On the application part you can configure application groups in which multiple applications can exist. This part is useful for assigning the group of applications to users via one assignment instead of each application separately. I've seen products where the creation of a published application is done more nicely, but it's working and functioning.

AppliDis has several display methods for showing the application. Currently they are advising to use Microsoft Seamless, but they also have their own seamless mode (where they can make adjustments for specific applications). There are also some advanced settings available like the amount of instances, CPU priority level and screen resolution options.

Edition of an application

General informations Localization Groups Advanced settings

Name displayed for the Application: Notepad

Icon:  Replace

Executable file version: 0.0.0.0

Execution mode: Seamless (Microsoft) ▼

Process monitoring: Automatic (recommended) ▼

Application description:

Parameters:

Running requiring UAC: ☐

OK Cancel



At the Desktop Level you have the option to only show applications that are available as Application within AppliDis. Together with the option to provide a special AppliDis start menu, the product also have User Environment Management capabilities.

The second step is to import the groups into AppliDis. This is done in User Groups also at the Publication workspace. Here you can add Active Directory Groups and/or Organizational Units. The added groups and OUs can be used in the following step to assign application and/or desktops to these objects.

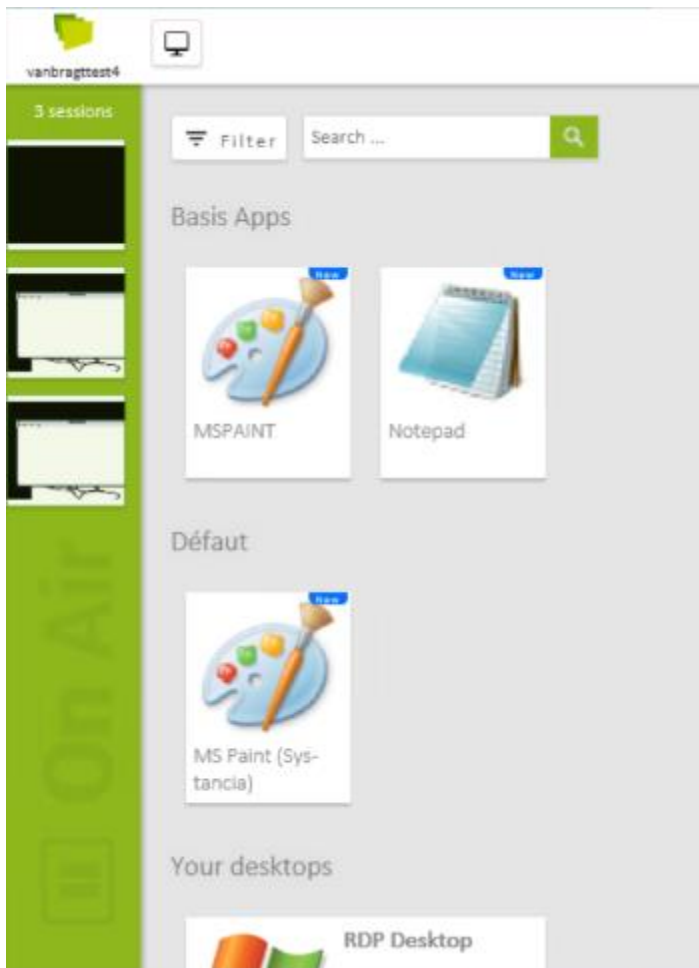


After adding the User Groups into AppliDis the user groups and applications/desktop are combined as Subscriptions. In this part you are assigning the applications and desktop to the user groups, so users can actually access the application via the connection methodologies provided by Systancia.



Using the AppliDis environment

Now we have the application and users connected to each other we have set-up the basic environment and users can connect. AppliDis offers a full client and a portal access methodology, just like most other vendors. Taking a closer look to the portal it's easy and simple to use.



After logging with the user credentials the assigned application and desktops are shown. Starting the application is working fine, AppliDis has nice feature showing the active session in the left pane including the current view of that application. Logically this review is not a performance test, but the application response was fine in my test environment.



Monitoring

Within the overview workspace, the monitoring capabilities of AppliDis are available. Just like the other workspaces in the console, the overview tab starts with an overall view of the infrastructure. A nice feature is that on the top layers with a red or green color the overall status is already shown. This shows quickly where more investigation should be done.



Besides the color signals also the most important information for each component is shown. For example the current and active user sessions, CPU/Memory load on the RDS servers and the actions and responses on the database. The information shown can be adjusted a bit, by choosing which of the available options can be shown. For each component sub options are available showing some more detailed information in a new window. In the new windows the sub options are showed together in two categories: actual information and statistics (history).



Details of AppliDis overview

Applications/Desktops Load balancing Modules Monitoring Monitoring alerts System events RDS Sessions Used Licenses Sessions User activities Maintenance

User activities

Running applications Running desktops Search

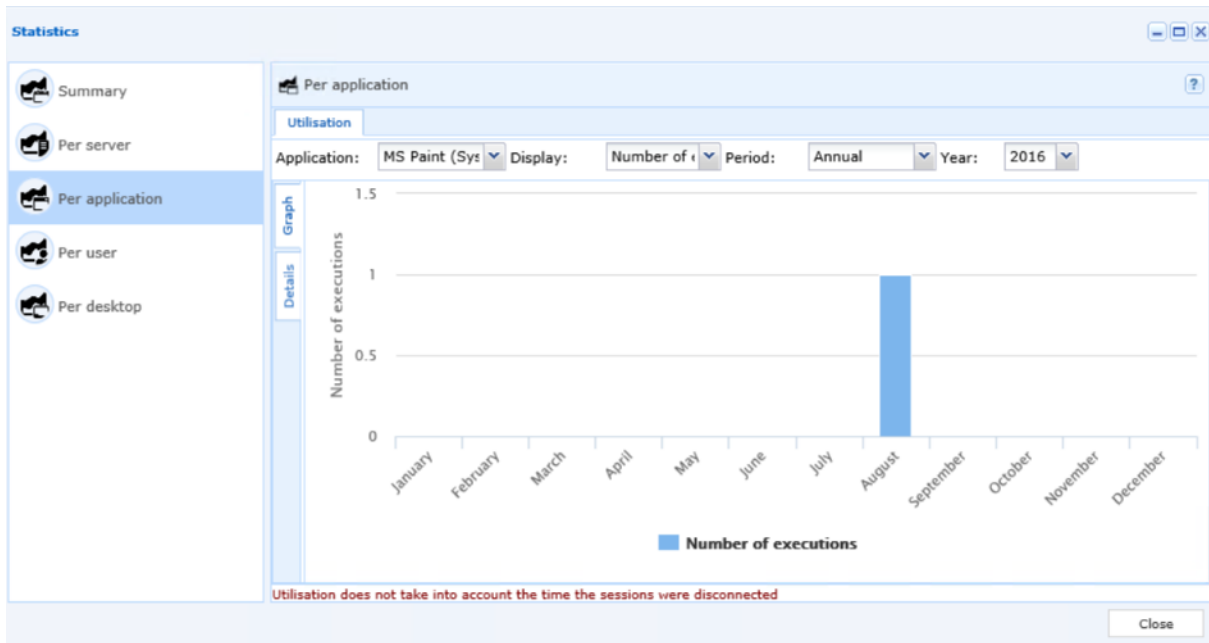
Name	Clients	Last action	Delay	Sessions Nbr.
vanbragtttest4	2	Launch	11m	1
vanbragtttest2	2	Launch	11m	1
VBN-SRV200 (192.168.77.66) Last action: Launch , Delay: 11m , Nbr. sessions: 1				
vbn-srv200.vanbragtnet.local (192.168.30.201) Last action: Closing Session , Delay: 11m , Nbr. sessions: 0				
vanbragtttest1	1	Launch	11m	2
vanbragtttest5	1	Closing Session	42days18h17m	0

Page 1 of 1 Elements by page: 15 Displaying users 1 - 4 of 4

Close

The actual information sub options shows the monitoring window. In here you can find the current sessions, the used licenses, running applications and/or desktops, more detail information about the server resource usage and user activities. I really like the System Events option, where you can retrieve event viewer messages from the servers within the AppliDis management console. Also available within monitoring is the monitoring alerts subcomponent. Within this subcomponent alerts will be shown which you have defined within the advanced configuration mentioned later on.

Within the statistics you can see that duration and amount of executions on several levels (server, application, desktop and per user).



Advanced Configuration/Features

Now we have gone through the basics of AppliDis and set-up the infrastructure it is time to dive deeper into the product. In comparison with other products in the market AppliDis offers a lot of advanced features, which some of them are pretty unique. All this can be found within the Configuration workspace. I will describe the expected features (and how they are available) and logically the features that I think are important or really nice.





Application Priorities

The availability to assign a different CPU priority level to published application.

Anticipated referencing

With this feature all options configured within AppliDis (application/desktop management) on one server can be set on another server. This is useful if you have lots of applications published and with two simple steps a new server can be configured with those publications as well.

One step further AppliDis Provisioning allows administrators to deploy and maintain AppliDis application servers through utilizing the cloning capabilities of the hypervisor. You can configure a single 'reference' server and deploy multiple servers from this reference automatically. In the event of application updates being required, the reference server can be updated once and all of the Application Servers can be redeployed with the latest updates. This task can be performed on demand or scheduled for out of hour's operation.

Dynamic Management

Earlier in the review I already discussed the Extended VDI option. With the Extended VDI the cloning capabilities of the hypervisor are being used and within the Dynamic Management you can configure the parameters for the cloning options like how many clones can be created at the same time. I think the option to configure the option to delete clones (within the deprecation rules) if the usage is less than the defined threshold is pretty neat. When using Extended VDI also the VDI scripts option is interesting. Here you can define scripts that can be configure to run before or after the cloning and/or the closing process.



Dynamic management

Dynamic management | Deprecation rules

AppliDis VDI Provisioning

Activation of AppliDis VDI Provisioning: ☒

Maximum of clones created at each supply: 4

Space to preserve on DataStores having dynamic clones (%): 20

Usage threshold to trigger the supply of pure dynamic pools (%): 90

Default usage threshold to allow a desktop group supply (%): 70

Default usage threshold of a desktop group to allow depreciation (%): 20

Provisioning service authority

Save the provisioning service authority : ☐

Domain administrator account:

Password:

Retype the password:

Service active on: VBN-SRV171

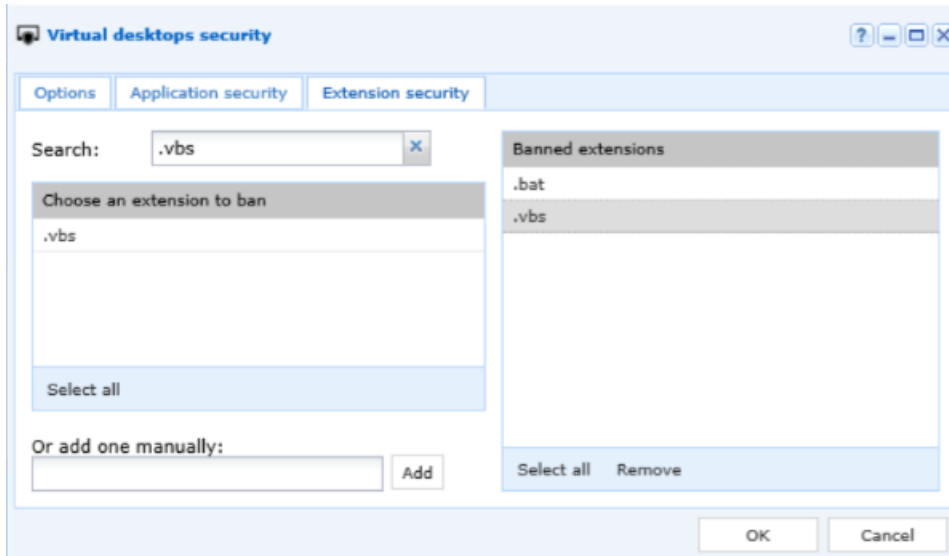
State :Many administration servers identified.

Please set up a network administration account to manage redundancy otherwise the service will be active only on the main server without any possibility of support on failure.

OK Cancel

Virtual Desktop Security

This feature is also a UEM component. Within Virtual Desktops Security you define which applications and/or extensions are not allowed to start within the session. This feature is nice as it is not available in most competitors' products but is more limited (as it is all or nothing) than in full UEM products.



Virtual IP

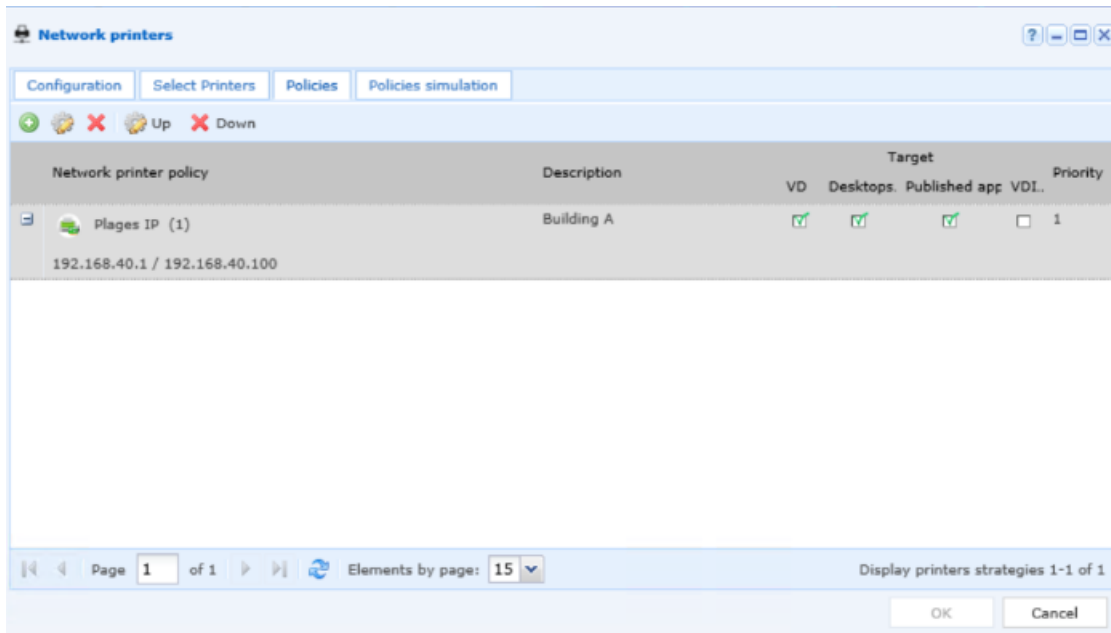
Virtual IP can be used to simplify the access to the administration servers. In the case where the environment has more administration servers, you can set-up a specific IP address and assign the administration server to this IP address. In this case the administrators only need to have one IP address (hostname) to remember independent of the availability of the administration servers.

HTTP Gateway

Here you configure the IPDiva appliances you want to use for remote access. By default all traffic is routed through appliances, if you would like to connect directly for your LAN users you need to add a filtering where you define for which IP address the gateway should not be used.

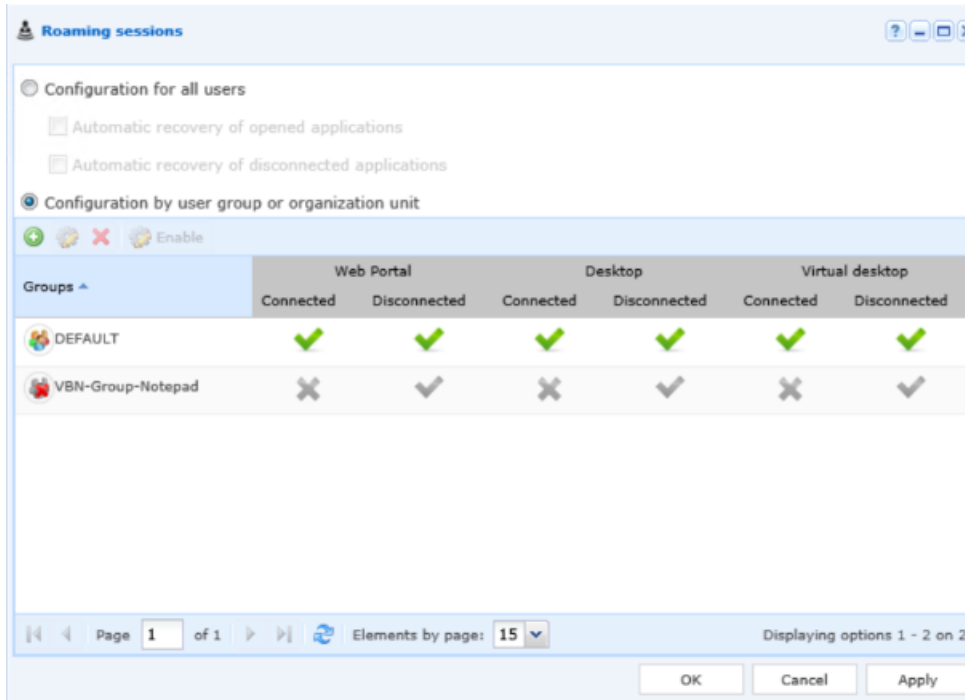
Universal Printer / Network Printers

Universal Printer is an AppliDis solution for client printer mapping. It is comparable with other vendors, where their own printer driver is running on the RDS servers, which redirects the print jobs to the local available printer driver which actually sends the print job to the printer device. Network Printers is again a UEM component in the AppliDis product. In this feature printer assignments to the end user within the session can be arranged. Printers can be assigned via policies, where the policies are based on client IP address, user groups and client name. A nice feature which is normally available in a separate UEM product.



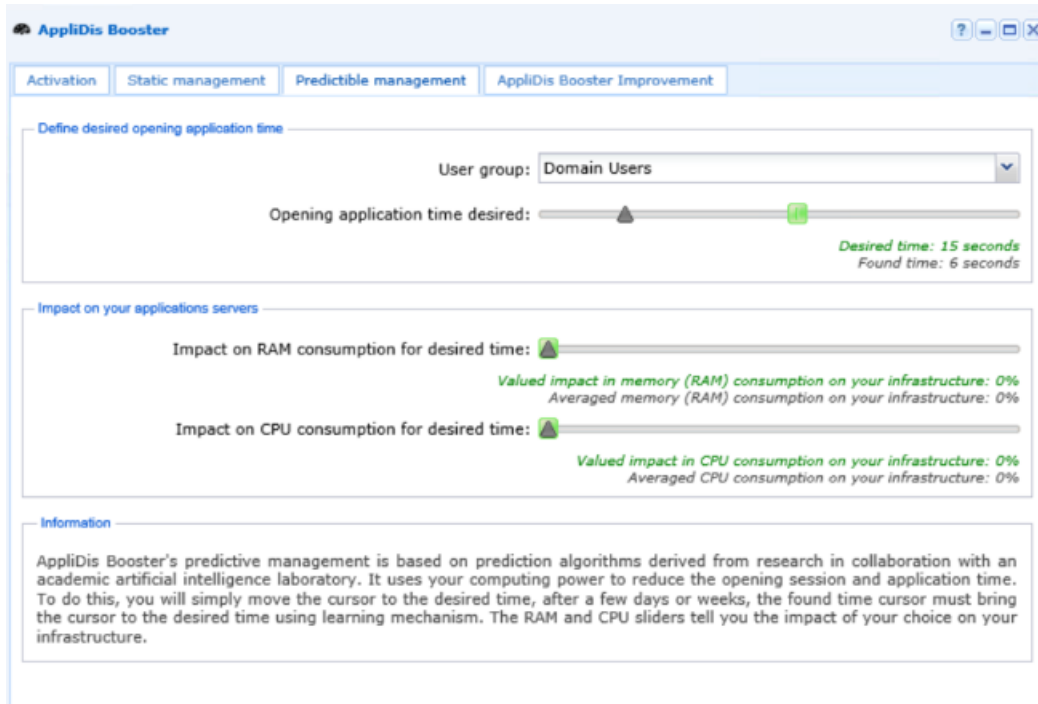
Roaming Sessions

Roaming Sessions is one of those features I really like. Within Roaming Sessions you can specify how the product should handle the user session when the user connects again with an active or disconnected session. What I like is the possibility to specify different settings both on the connection type and per user group.



AppliDis Booster

AppliDis Booster is all about the user session start performance. Besides the options you have available in other product pre-starting the session for the end-user and keeping the session open for a defined time frame when the last published application is closed by the end user. These options are available within Static management. What's unique is the Predictable management feature. Within this option you can define the desired application start-up time for a specific user group. In the background the product gathers information about the user activity and auto starts the session in advance. So the product knows that User X start Application Y every day on 9:00am and start the application therefore in advance so the user can directly start using the application on 9:00am. A cool technology as the system is self-learning about the user activity. You can help the development of the feature by sharing your session times with Systancia.



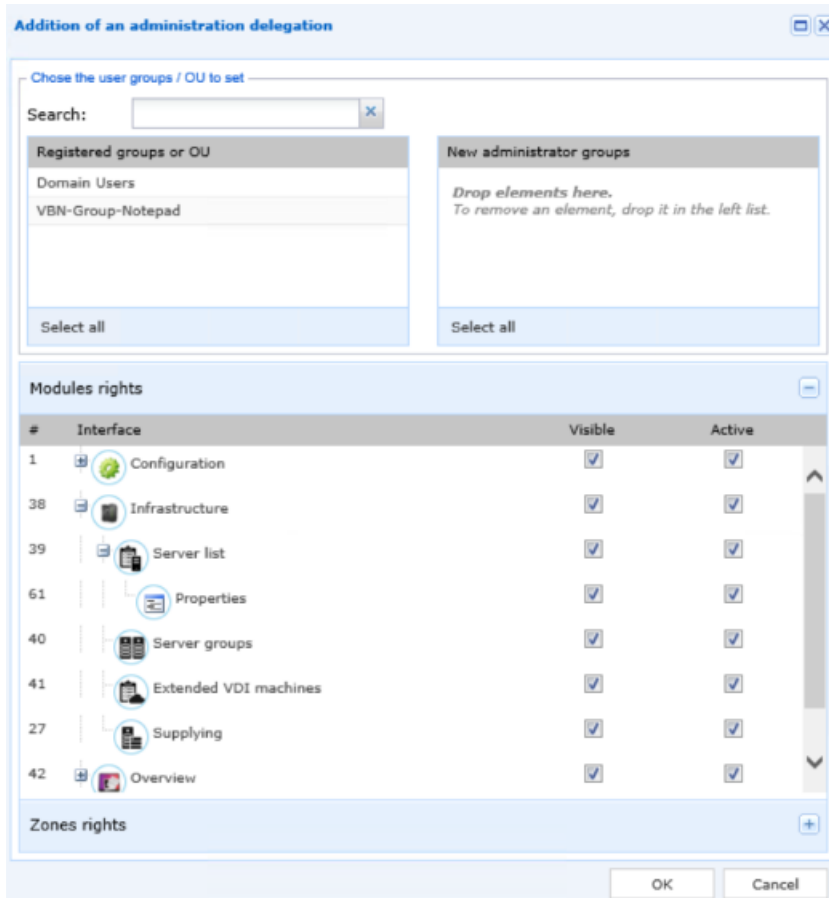
Load Balancing

Just like all VDI product AppliDis needs to have a load balancing mechanism available in their product. The load balancing is (logically) active by default. In this option you can configure the load balancing rules. In comparison with other products is pretty different, where the rules are based on actual figures. Within AppliDis you can adjust four parameters (server static characteristics, server dynamic characteristics, user behavior and intra-session behavior) to determine how load balance should be arranged. Probably you will need the help of Systancia or a specialist to set-up the best configuration for your environment. Within exclusion thresholds you can set-up hard values for maximum user sessions and maximum CPU and/or memory usage on a default level and per server (if required).



Administration Delegation

AppliDis has a good and detailed delegation of control included. Based on User Groups you can specify if the group has read (visible) or write (active) rights on each (sub)component. The only thing you should know that you need to add the group into the product at the Publication level (as all settings that are based on user groups have that requirement).

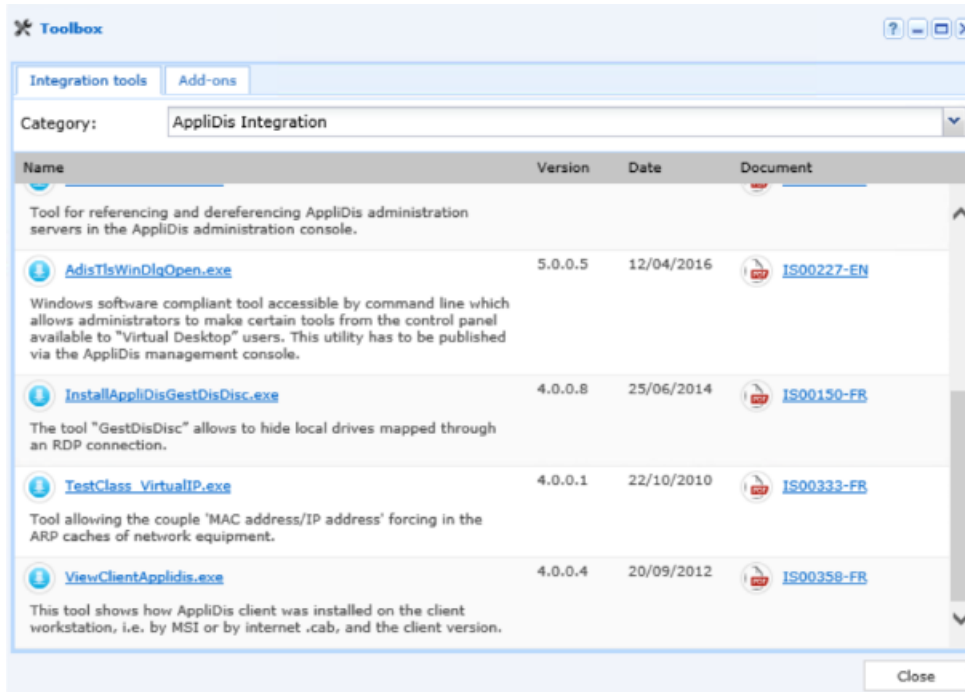


Customize

Within Customize there is the possibility to change the look and feel of the web portal. You can add your company logo and change the color used on the Front Page. The logo will also be shown on the page the applications are shown, but on that page no further customization is visible (default color).

Toolbox

The toolbox component is a pretty unique part in the product. In here Systancia places additional tools or scripts that complement the product or simplify the administration/configuration of RDS/VDI infrastructures. I guess most administrators won't use the tools a lot until there is a specific issue they encounter, which can be solved by one of those utilities in the toolbox. Despite I like the way Systancia helps companies by providing add-ons on their product (indirectly).



Conclusion

I'm always happy to see products in the SBC/VDI space. For the midmarket and enterprise only MS, Citrix and VMware are there, the other products are aiming on the smaller environments. AppliDis for sure can compete with MS, Citrix and VMware looking at the features and possibilities of the product. They have several features that are unique or smarter than seen in the competitor products, especially on the User Environment Management part. I also like that the consoles are already (fully) web based and they use smart software that is able to learn. Like every product you need to get familiar with the interface and the characteristics of the product. As an example I needed to get used that the AD groups should be added into the product, before I can assign them to application or configuration settings.

Personally I think they can do a better job on the installation part, when discussed with Systancia they mentioned they are working hard on that part. Another thing is that you can see that the origin of the product is built in the French language, sometimes you see some French words (which will be reviewed by Systancia to ensure that everything will be shown in English). On the end-user level it would be nice if more languages were supported (for example within the web portal). Systancia told me that his in on the current roadmap, starting with Japanese.



Overall it is good product that definitely should be considered when choosing a SBC/VDI product, especially as they can offer as the only one the whole range from Thin Client system to the VDI session and everything in between. Also the simplicity to deliver redundancy in the database layer is a big plus.



About the Author

Wilco van Bragt is an independent consultant and author based in the Netherlands. He is the owner of the Server Based Computing and Virtualization website called [VanBragt.Net Virtualization](http://VanBragt.Net), where he is publishing several articles related to Virtualization topics and product reviews. Besides Wilco van Bragt presents on several independent conferences and also writes articles for several other websites. Wilco van Bragt is self employed ([VanBragt.Net Consultancy](http://VanBragt.Net)) providing consultancy services in the Netherlands and Belgium. Wilco van Bragt is a MVP on Remote Desktop Services, a RES Valuable Professional and a Citrix Technology Professional.

About Systancia

Systancia, an application and desktop virtualization software vendor, is a French corporation recognized for its AppliDis solution. AppliDis has grown rapidly over the past few years and was elected Best VDI Solution by experts in the field in 2014 among the industry's historical players. Now also including France's leading offer in terms of security of access following its acquisition of IPdiva, Systancia expertise has gained international presence since the French Caisse des Dépôts et Consignations (CDC) - now BPI (Banque publique d'investissement) - alongside A plus Finance, became a shareholder of the company.