



ThinPrint®

RAS Solution Guide | Parallels Remote Application Server

From ... to cloud ready in less than one day with Parallels and ThinPrint

Business Challenges

Mobility, security and compliance, automation, and the demand for “the workspace of the future” are just some of the challenges that businesses face today.

The cloud is best positioned to support these challenges, but it can be hard to pick the right kind of cloud and find the right balance between cost and benefits.

Parallels Introduction

Parallels is a global leader in cross-platform technologies and is renowned for its award-winning software solutions that cut complexity and lower costs for a wide range of industries, including healthcare, education, banking and finance, manufacturing, the public sector, and many others.

Parallels® Remote Application Server (RAS) provides easy-to-use, comprehensive application and desktop delivery that enables business and public-sector organizations to seamlessly integrate virtual Windows applications and desktops on nearly any device or operating system.

ThinPrint Introduction

ThinPrint is a global leader in solutions that support an organization's digital transformation, helping ensure users can draw on highly reliable and innovative print solutions that support today's and tomorrow's requirements.

More than 26,000 customers draw on ThinPrint's experience for:

Perfect Print Management for Enterprises – Private cloud-management, security, and print-processing

ThinPrint print management software enables optimal print support for all business processes. It offers lucrative cost savings and a significant reduction in the workload for IT departments, as well as improved security.

Server-Free Print Management for PC and Mac – Obtain hybrid cloud management and local print processing. ezeep Dash from ThinPrint lets you get rid of the management burden but keep printing a local process.

Fully Managed Cloud Printing for PC, Mac, Android, iOS, Chrome and More – Get 100% cloud-based print management and print processing. Enable users to print with any device, from any location, to any printer. With ezeep Dash, the whole print process is taken to the cloud.

Joint Value Statement

Together, Parallels and ThinPrint allow an organization to become a cloud-ready business on its own terms, with unprecedented ease and cost-effectiveness.

We support any endpoint device from a desktop PC to a smartphone or tablet, can deploy on-premise or in the cloud, and follow your business as it completes its digital transformation.

You may decide to start digitally transforming your business by delivering applications or desktops from an existing server in your datacenter and move to Amazon Web Services™ (AWS) or Microsoft Azure later. You can also replace user workstations with newer, more mobile devices, or expand from an initial pilot group to new use cases for the entire company.

Whatever your plans are, Parallels and ThinPrint will help you implement them with easy, cost-effective solutions and the ability to adapt to future challenges. Below are just a few examples of the value we deliver together.

Cloud Ready

Parallels RAS supports on-premise, hybrid, or private cloud deployments. If you are using hyperconverged infrastructure from Nutanix or HPE, that is supported as well.

ThinPrint solutions can be deployed through on-premise or hybrid deployments, or on Azure, AWS, Google Cloud, and more. Cloud infrastructure is paid for on a per-use model; the more resources needed, the more expensive. ThinPrint can help reduce costs with three major components:

1. Reduce the computing resources needed to deliver a document to the right user by 20%.
2. Reduce networking/bandwidth cost to deliver a document to the right user by up to 98%.
3. Securely connect cloud applications to the user's local infrastructure without the need for VPNs or expensive hardware, eliminating up to 95% of related efforts and costs.

Mobile Ready

With unique Applification™ technology from Parallels, employees can use the native touch gestures of mobile devices—swipe, drag, tap to click, or zoom—to interact with any remote Windows application on both smartphones and tablets, making them productive on the go.

With ThinPrint iOS, users can print from their Parallels RAS provided application to an AirPrint printer, wherever they are. Corporate, networked printers are assigned based on a user's IP address, and an innovative self-service allows users to utilize printers they have permission to use on an as-needed basis—without involving IT through an expensive help desk call.

Scalable

Parallels RAS contributes to business continuity by providing a highly available and reliable solution as your organization scales up or down. Parallels RAS supports gateway and server redundancies to remove any single point of failure. It also checks the availability of the component before forwarding a connection, ensuring stable access to virtual workspaces.

ThinPrint's solutions have been deployed to serve environments as large as 200,000 users. Through flexible licensing, automation, load balancing, high availability, support for secure gateways, and widespread integration with endpoint devices, ThinPrint can deliver added value for a steadily growing rollout or niche applications, as well as for large-scale enterprise deployments.

Flexible

The comprehensive solution from Parallels RAS allows your employees to access and use applications and data from any device. It's seamless and easy to deploy, configure, and maintain.

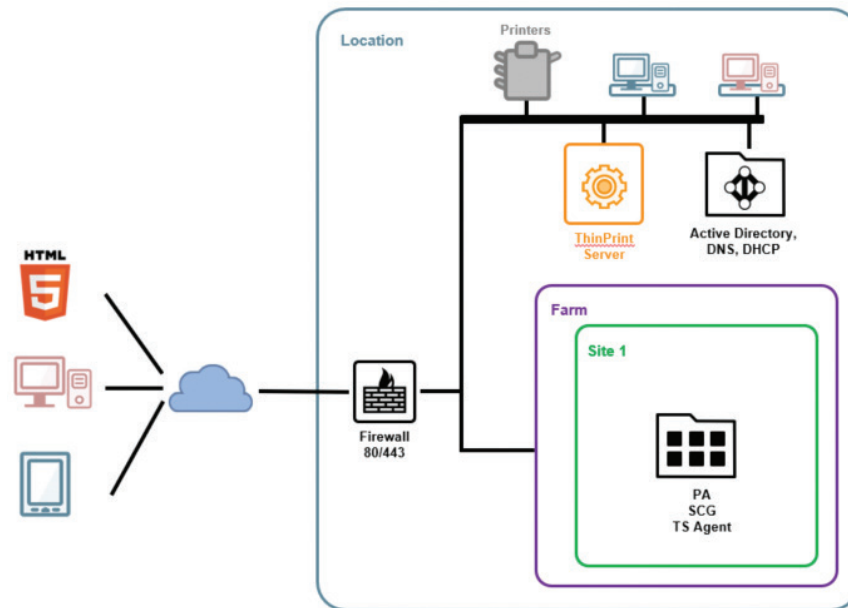
ThinPrint's solutions have the necessary flexibility to support your business, whether it's dynamically assigning a printer based on a user's location or device; supporting thin clients and mobile devices; or supporting specialty devices such as label printers.

Productive

Parallels RAS was designed for all users—not only employees, but for system administrators, help desk staff, and datacenter operators as well. A set of automated wizards reinvents the way terminal servers, applications, and desktops are managed.

Printed paper remains the most user-friendly extension of the digital interface; ThinPrint extends your secure, digital workspaces to paper. As organizations revamp their operations to be both digital and physical, ThinPrint delivers a unique opportunity to integrate this proven, vital part of a customer's operation with their digital-transformation strategy.

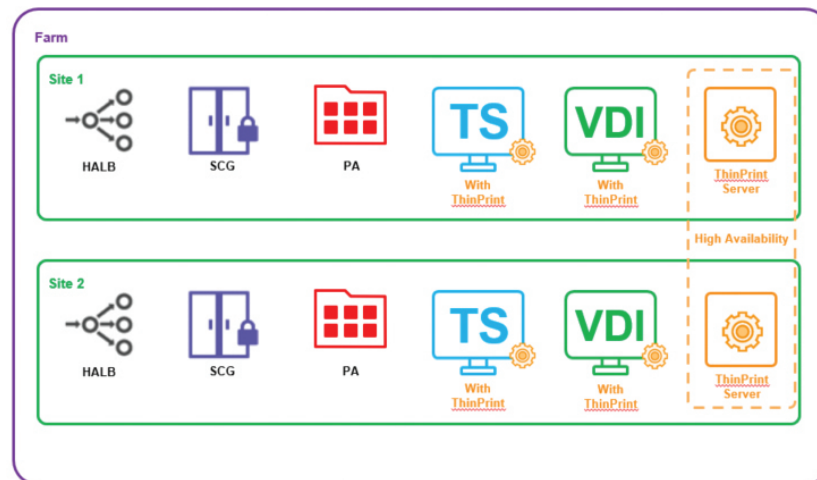
Technical Description



All your printing needs fit easily within a Parallels deployment with ThinPrint. Take advantage of centralized management for all Parallels use cases by simply deploying ThinPrint Engine into your Parallels environment.

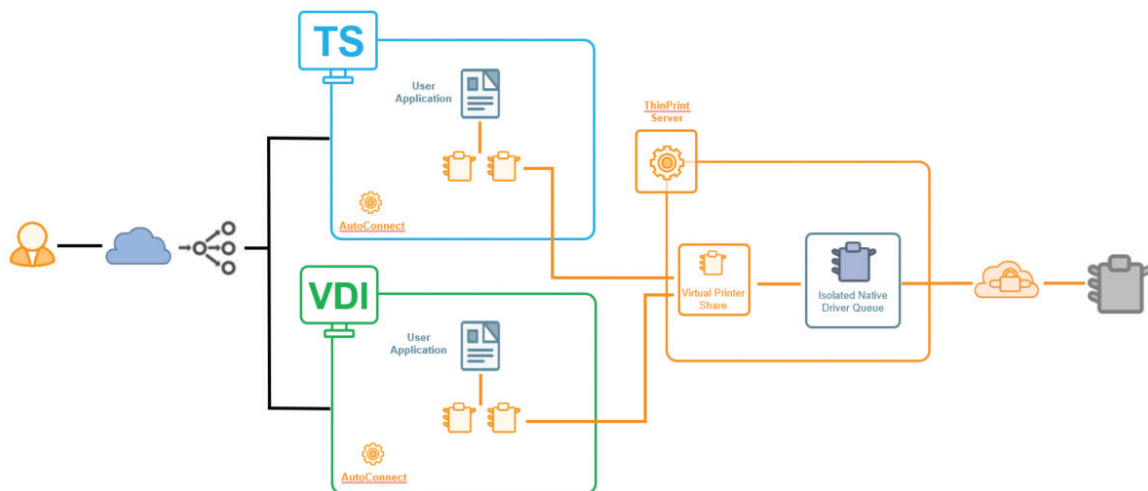
A core benefit of ThinPrint is leveraging Windows Printer Server's power, granular feature control, extensible resources, and true enterprise scalability—without the downsides of native driver version issues, queue deployment speeds, and complex AD structures or scripts. Optionally super-power those servers by making them highly available, even across sites or farms. ThinPrint server software can be installed in minutes onto an existing Windows Print Server, and through GUI or PowerShell commands, your team can fully and truly isolate your environment's native printer drivers to a single version on this server.

To help ease your migration, ThinPrint can even provide virtual printer queues from the exact same share paths your servers used to offer native driver-backed options.



AutoConnect allows users to easily log into their normal Parallels experience and automatically have the right printers for the right people and places mapped faster than ever, with fewer resources. It seamlessly fits into their day-to-day workflows.

The AutoConnect feature can be added to any current Windows Server, desktop OS, and physical or virtual machine to provide lightning-quick, laser-precise queue access on a per-user or per-session basis. ThinPrint is also easy to deploy via SCCM and other enterprise methods and can be managed via Group Policy to your RDSH, VDI, remote PCs, and more.

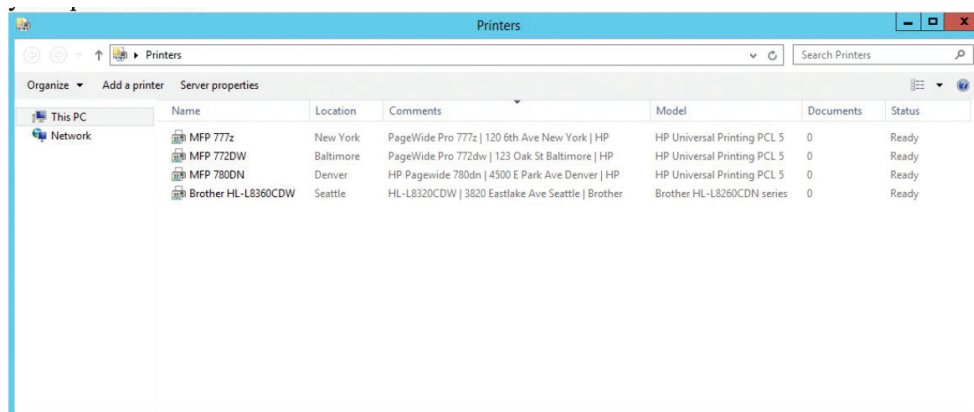


When users need to print a document either to your central printers or to those remote appliances which your team approves, they simply use the same actions as they always have. The only changes they'll notice are that the printer interface is fully standardized for virtual queues, regardless of manufacturer, and that their print jobs are compressed, streamed, and repeating elements dynamically cached in order to bring bits to toner in record time.

Your IT team will enjoy the confidence of reliable print processes, easy troubleshooting, and reduced user frustration and help tickets—as well as spending fewer resources on printing in general.

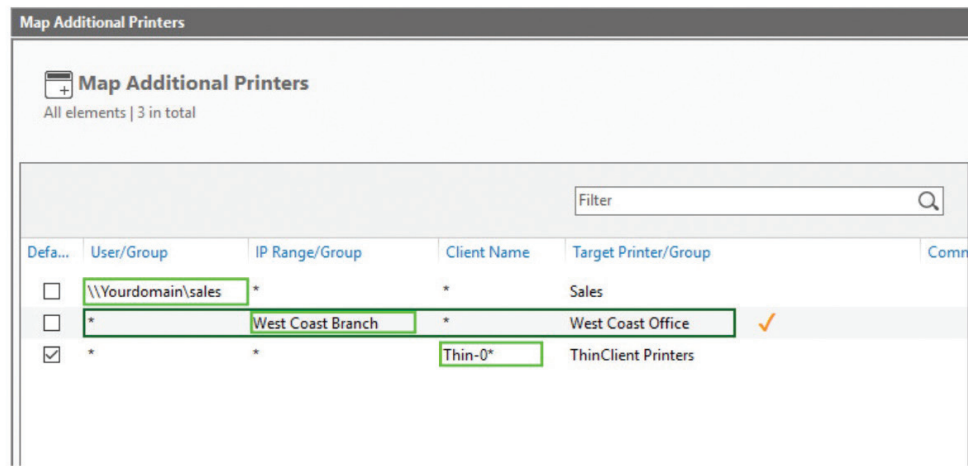
ThinPrint Engine (on PS) Setup

Configure native printer objects on your ThinPrint server with standardized names, optional comments, locations, specific defaults and settings, and Windows security permissions to meet your specifications.



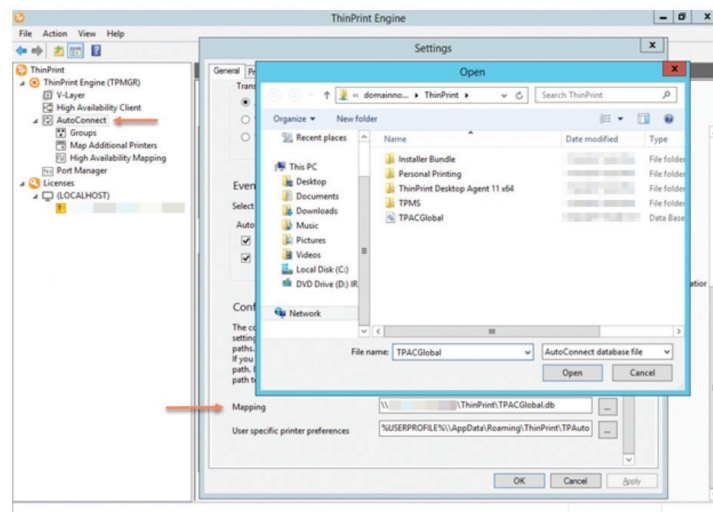
Install your ThinPrint Engine software as dictated by the Quick Setup or Full Installation guide.

Next, using either the ThinPrint Management Console or PowerShell scripting, isolate native drivers by enabling V-Layer. (See full V-Layer customization options in the ThinPrint Installation Manual.)



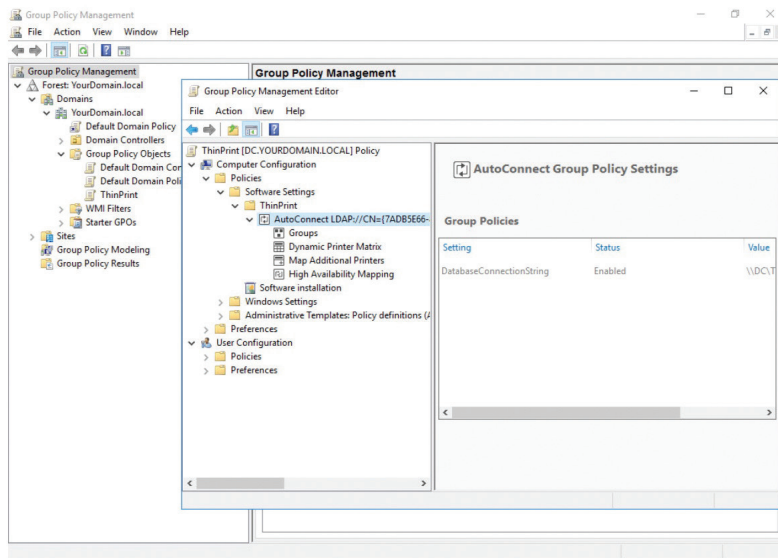
The AutoConnect database is created automatically on install, but you'll want to customize it so your users get the right printers, in the right context, from a healthy and available printer path. Simply select which of the filtering options you want to apply to each rule, then which printer(s) should be connected when a match is found.

After you have your policies the way your teams need, simply relocate your AutoConnect database from the Engine's local directory to a shared file storage path where all Parallels sessions can benefit from AutoConnect. Through Engine consoles or GPO, you can point all locations to the sale rules.



Now that you have virtual printer objects and a central authority for mapping, add the simple mechanism to provide AutoConnect to your users. Install the ThinPrint Engine (Server OS) or Agent (Desktop OS) onto the remote session host, virtual desktop, or remote PC and configure it to use the central AutoConnect.db file you're planning to use. (Additional configuration detail can be found in the Full Installation manual.)

Later on, you can easily and quickly change your mapping policies and view logs, as well as manage settings from any of the ThinPrint Management Consoles in your environment through PowerShell commandlets or ThinPrint's optional Management Tools.

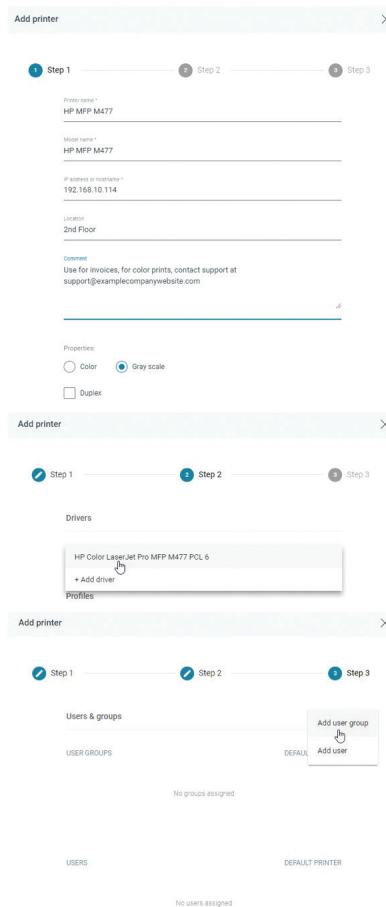


Once a user logs onto the session, any printer list entries they have will be represented by ThinPrint virtual printer queues, ultimately backed by the appropriate native printer drivers' single version in your ThinPrint Server(s).

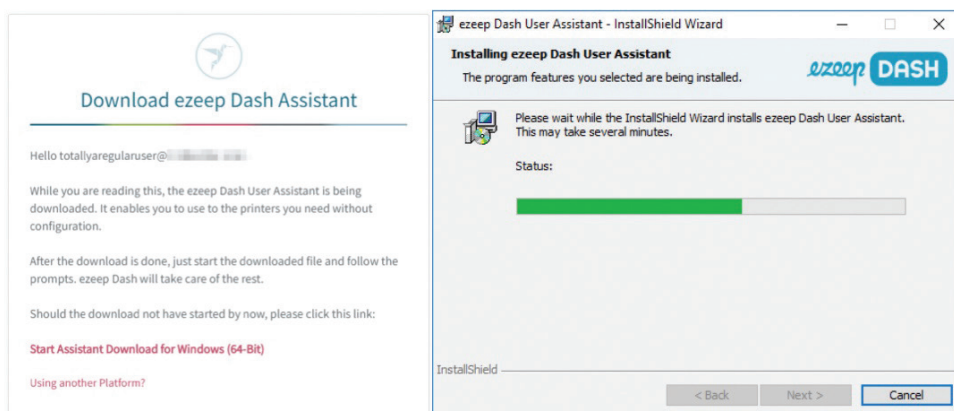
Sidebar: ezeep Dash

Using the ezeep Dash web console, you now can manage the Parallels printing processes without any servers at all.

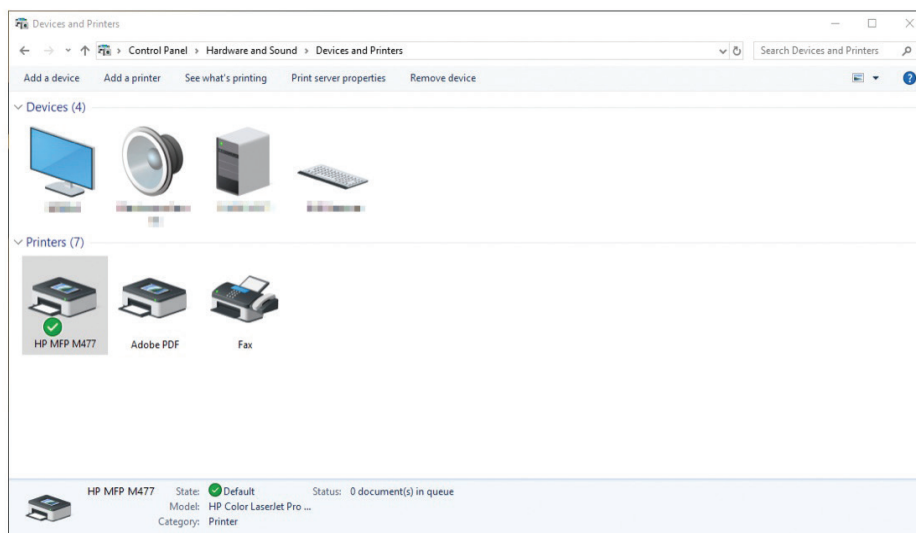
Simply sign up for your cloud-based print management account at dash.com/ezeep, select your drivers (or upload your own) from the online driver repository, and select which users/groups to deploy which printers to.



Then invite your users to download their already fully customized Dash agent to get the right printers delivered to their computers. They'll simply install the agent. For a more scalable deployment, you can push out deployments via enterprise software deployment management suites.



Once your IT team deploys or your users download and install the Dash agent, the printers will appear as locally available objects.

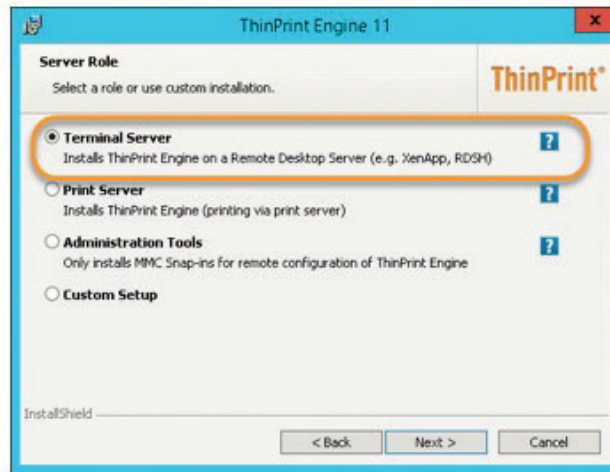


Integration with Parallels (RDS and VDI)

Now you have a centralized management system for creating fewer printer driver versions, faster queue deployments, and easier long-term upkeep, we want to extend the benefits of your AutoConnect process to the users' Parallels sessions. To do this, we'll simply add the software that runs ThinPrint's lightweight, AutoConnect to the TS, RDS, VDI, or other sessions where users create print jobs.

AutoConnect is provided according to the underlying Operating System that users are working. To simplify your installations, ThinPrint provides both a desktop-OS version and a server-OS version.

In the case of Windows Server versions, we'll simply run the ThinPrint Engine Installer (or by following the MSI instructions found here) and select 'Terminal Server' when selecting the servers' 'role' in the install wizard.



Using the MMC Snap-In on this server (or the optional GPO tool), configure this instance of the ThinPrint Engine to use the same Network-shared AutoConnect database as you've configured on your ThinPrint Server (the location of your ThinPrint V-Layer Queues).

In the case of a Desktop-Kernel Operating System (Such as Windows 7 or 10), we'll instead install the ThinPrint Desktop Agent to provide AutoConnect to those sessions. The Desktop Agent can be downloaded separately from ThinPrint's Website and installed via your service account or using the same MSI instructions listed above. The Agent does not have a Server MMC Snap-in for configuration but will only need the locations of your ThinPrint License Server (DNS or IP) and the SMB path to your AutoConnect Database.

Now simply reboot these server(s)/desktops to finalize the ThinPrint installation.

Links

ThinPrint Engine Version 11 MSI instructions:

https://download.cortado.com/docu/ThinPrint/WebHelp/en/ThinPrint_docu/Unattended_Installation_of_ThinPrint_Engine_components/Products_and_components.htm

ThinPrint Desktop Agent:

<https://www.thinprint.com/en/resources-support/software/agents/>

ThinPrint Engine Free Trial:

<https://www.thinprint.com/en/download/thinprint-engine/>

Additional resources for VDI printing:

<https://www.thinprint.com/en/solutions/vdi-printing/>