

Using Arkeia as an Image Server

Perform Normal Backup Operations and Host Updated Images of Default Installations

In a modern business environment, image deployment servers are particularly handy when a pre-built image is used on a regular basis for standardized servers and even desktops. Arkeia is incredibly flexible and while performing normal backup operations, it can also be used as an image deployment server to host updated images of default installations of any Linux and Windows operating system. In this function, Arkeia is ideal in a small to medium-sized business. This article will take you through a hypothetical scenario where Arkeia would be used as the image server.

In our example, we will use a Suse 10.3 install with all the current patches applied. Further in our example scenario, our backup server will use the IP address 192.168.1.10. The "image" client could be a "default" installation of a Linux of any version. The "image" client will be configured with the IP address of 192.168.1.200. Any remaining software and updates would also be installed. The backup server will require a DR license for this to work properly. In this scenario, a client license will be used to backup the default "image." This license will need to be maintained as long as this image is needed.

Once the requirements have been met, Arkeia will be installed, configured, and tested. Then a backup will be made of the "image" client. This backup will include all of the necessary DR information. (You should consult the DR manual for more information on how to properly backup a client). Alternatively, using the new Windows DR for Vista or Windows 2003 we could do the same DR.

With the backup completed, the base "image" client will be changed so that it is no longer the "image" client and it will become a regular client on the network. The IP address will be changed (we could use 192.168.1.100), and the hostname will be changed as well. If Arkeia is only needed as an image server, Arkeia can also be removed or even just made to no longer work by stopping the service from starting. If this server is to be backed up on regular basis, in addition to the IP address and hostname change, the nlp.id file would need to be changed.

This is a unique identifier for each client. It can be changed to any small string as long as it is different from every other client that has been backed up. The actual file to change is `/opt/arkeia/arkeiad/nlp.id`, in our example we will change the nlp.id to the short alias of the hostname and the fourth octet of the hypothetical address IP address: newhost100. Once the client is configured and ready for backup on a regular basis, only the directories that have added data since the image took place will need to be backed up. For instance, you might only need to backup and restore the `/home` directory on a file server. Or possibly just the `/var/www` directory on a Web server. Or just the Arkeia MySQL module on a database server. Obviously this would be up to the system administrator.

Also of note, any of these clients being backed up would need an Arkeia client license to be backed up and restored properly. Once the "image" client was configured as a different client, the next server could be put into production following the procedure for restore via a DR image. If a CD is used, the Arkeia DR could boot from the CD on the potential client, possibly a USB key, or even a TFTP image that is network booted. Once booted to the Arkeia DR image, the "image" client would be restored to the potential client. All of the "image" client settings would be used to restore the client. Once the server has been restored and restarted, the new server would have its IP address and possibly hostname would be changed to its actual setting. Going back to our example, we might use 192.168.1.101. We would repeat this for every client. If the image needed to be updated, we would load the "image" client onto a potential server, then update it. Once that was complete, a new DR backup would need to be made.

In regards to Windows 2000 and XP, the exact same procedure can be used as the above except that the Windows DR is a cold backup solution. Meaning that you have to backup the Windows "image" client while booted into the Windows DR CD (or USB key or TFTP image).

As you can image this would even scale well in a large environment with multiple backup servers on separate networks. One of the backup servers that were not busy 24/7 could exist as the image deployment server. This would continue a tradition of standardized deployment in a professional production environment.

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