

**WIP Deployment Notes**

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# Introduction

## Management Summary

This document details the various components of a WIP deployment.

## Change History

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| --- | --- | --- | --- |
| **Ver** | **Date** | **Author** | **Key Changes** |
| 0.1 | March 2016 | Ian Daniel | Initial Version |
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## Distribution List

|  |  |
| --- | --- |
| **Name** | **Role** |
| Storage Engineering | Reviewer |
| Storage Delivery | Reviewer |
| Storage Architecture | Reviewer |

## Glossary

|  |  |
| --- | --- |
| **Term** | **Definition** |
| ISCSI | A network based block protocol used to present LUNs to systems from a NAS device. |
| vfiler | A logical storage virtual server, also known as a Storage Virtual Machine (SVM), which contains interfaces, Volumes, and configuration information such as access control details. |
|  |  |

## References

|  |  |  |
| --- | --- | --- |
| **No.** | **Title** | **Location** |
| 1 | 7-Mode WISP/WIP Engineering Standards | <https://theshare.thomsonreuters.com/sites/DCO_Storage/Unified%20Storage%20DE%20Documents/NETAPP/Ontap%207-Mode%20STANDARDS/Thomson%20Reuters%20-%20SQL%20Server%20and%20iSCSI%20on%20NetApp%20-%20Deployment%20Guidelines%20v6.pdf> |
| 2 | cDOT WISP/WIP Engineering Standards | <https://theshare.thomsonreuters.com/sites/DCO_Storage/_layouts/WordViewer.aspx?id=/sites/DCO_Storage/Unified%20Storage%20DE%20Documents/NETAPP/Ontap%20CDOT%20Standards/WIP%20and%20WISP%20Procedures%20on%20cDOT_v1%208.docx&Source=https%3A%2F%2Ftheshare%2Ethomsonreuters%2Ecom%2Fsites%2FDCO%5FStorage%2FUnified%2520Storage%2520DE%2520Documents%2FForms%2FAllItems%2Easpx%3FRootFolder%3D%252Fsites%252FDCO%255FStorage%252FUnified%2520Storage%2520DE%2520Documents%252FNETAPP%252FOntap%2520CDOT%2520Standards&DefaultItemOpen=1&DefaultItemOpen=1> |
|  |  |  |

# WIP

## ****Overview****

WIP is a DCO standard deployment of ISCSI for flat files i.e. non-MS SQL use. It is a supported stack within DCO for use via both 7-Mode and cDOT.

## ****Platform Deployment****

The Windows team deploy the platform side of this solution following these guides.

<https://theshare.thomsonreuters.com/sites/AI/Arki%20Wiki%20Pages/WISP%20WIP%20-%20(Windows%20iSCSI%20Platform).aspx>

<https://thehub.thomsonreuters.com/docs/DOC-1581706>

An intake is required in order to setup a WIP solution.

## ****Automated Backups****

The WIP solution relies on SnapDrive to take the snapshots as detailed in the storage WISP/WIP Standards. This is achieved on the platform side utilising IMON and a utility called SnapBackup.exe.

C:\iMon\PfW\script\SnapBackup.exe

This utility will create a consistent snapshot when called on the server for any LUNs mapped that have a volume path including either **wip** or **wid**.

The snapshot naming is as follows:

Servername\_YYYYMMDD\_HHMM

## ****Manual Backups****

In the event you want to create a manual backup you can use SnapDrive to do this and the process is detailed in the platform documents referenced earlier.

## ****SnapVault Backups****

Scripts are run periodically on the DFM servers which will copy SnapShots from a WIP solution onto a SnapVault backup vfiler provided there is a valid SnapVault relationship for them. Please refer to the Engineering standards for the correct Snapvault configuration.

# NTFS Compression With WIP

## ****Overview****

There are instances where NTFS compression is required on WIP deployments. These need architecture approval before implementation. The testing in SI shows no adverse affect on the controllers or vfiler in the event compression is used as the server itself is doing the bulk of the additional work.

It should be noted though that compression is not possible on a NTFS block size greater than 4K. The TR standards all use a higher block size and so a LUN would normally need to be reformatted to enable compression.

## ****Implementation****

All that is required is a LUN formatted with a block size of 4K. You simply open the LUN properties and select Compression.

