



Distribution Services Runbook

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Mobius VDR Server compared to Distribution Services

The below table shows a comparative study of how components of Mobius VDR Server are represented in the Distribution Services (DS) after a successful conversion.

Mobius VDR Server Component	Distribution Services Representation
A Report is a class representing content sharing common characteristics.	In DS, Reports are available as is for an ad-hoc Delivery and Reports are also converted into Recurring Deliveries which will get distributed every time a new Ingestion for that Report is created.
A User is someone who can access a Report, either by viewing it or downloading it or otherwise receiving a copy of it.	In DS, Users are called Recipients. They get added during the conversion process along with any Report Access Rights that they may have. They can also be added after a conversion using the Sync feature.
A Distribution Group is used to define the customization a packet must use during Distribution. This is done using Template Files which are stored inside a sub-directory which you can define as part of the Distribution Group's properties.	In DS, there is no concept of a Distribution Group after conversion. During conversion, each Distribution Group gets converted into a Deferred Delivery which can be used to trigger ad-hoc deliveries by manually selecting the required Ingestion(s).
Template files are stored inside a sub-directory which is defined as part of the Distribution Group's properties.	In DS, for each unique sub-directory name that is found in each of the Distribution Groups – both email and print – gets added as a Template – either Email Template or Print Template.
A Device is where the Print Distribution will be output to. It can be a physical printer or a printer that can store the content being distributed into an external file.	In DS, each unique Device is added as a Printer which is managed through a Print Agent which is available for every Mobius VDR Server.
A Report Access Right defines which User will receive what content and in what format – Email or Print or both.	In DS, each Report Access Right gets converted and added as a unique output preference to a Recipient. Print Distribution, Email Distribution and Email Notification are the three types of output preference which can be added. A Report Access Right which has all - Print Distribution, Email Distribution and Email Notification enabled, will effectively be added as 3 different output preferences of the Recipient in DS.
An Ingestion is a process of creating an archive of a Report using some content. In VDR after creating a new Ingestion, based on its type – Immediate/Deferred – it will either auto trigger the distribution based on the Report Access	In DS, for each Ingestion created it takes a maximum of 1 minute to be added into the DS records. Once added, if its type is not Deferred, then it will trigger any Recurring Deliveries that are pertaining to the Report for which the Ingestion was created. For a Deferred ingestion, no automatic

Rights defined for that Report or you can perform a Deferred Distribution using the Distribution Client app.	trigger of Deliveries will occur, and you can use that Ingestion to create any ad-hoc/on-time Delivery.
Immediate Distribution based on Report Access Rights happens when an Ingestion of 'Immediate' distribution type is created.	The same in DS is achieved using Recurring Deliveries – delivery with Delivery Type selected as 'When all selected Content arrives' – which will get auto triggered every time a new 'Immediate' type ingestion for a Report is created.
'Rerun previous distribution' in VDR Distribution Client app is used to perform a Distribution again based on previously distributed Ingestion records.	<p>The same in DS can be achieved in 2 ways:</p> <ol style="list-style-type: none"> 1. From DS page > Distribution Status tile. On that screen you can select the Action > Re-deliver option on any of the previously completed deliveries. 2. From DS page > Deliveries tile. On that screen you can select the Action > 'Create One-Time' option on the desired Delivery – which then opens a new one-time delivery creation panel in which you can select one or more ingestions that were previously distributed and finally click the Add Delivery button which will trigger the distribution.
'Process deferred distribution' in VDR Distribution Client app is used to perform the Distribution of ingestions that were created with the Distribution type as Deferred.	The same in DS can be achieved from DS page > Deliveries tile > Delivery of Deferred type. On that screen you can select the Action > 'Create One-Time' option on the desired Deferred Delivery which is listed. This opens a new one-time delivery creation panel in which you can select one or more ingestions that are 'Not yet delivered' and finally click the Add Delivery button which will trigger the distribution.

Distribution Services – The New Concept

Distribution Services (DS) is the web-based implementation with some upgrades to the existing distribution functionality of the Mobius VDR Server. With DS, you can now keep a track of the progress of the Distributions, create/modify Deliveries, create/modify Templates and manage Recipients from the Mobius Administrator's web UI.

DS only gets the resources from Mobius VDR server after a conversion/migration is completed. This conversion/migration is a one-step process to bring over the resources from Mobius VDR server into DS. Below is explanation of how the resources from Mobius VDR are interpreted and used in DS after conversion/migration.

- Reports

The Reports from Mobius VDR server are stored in DS records as is and as Recurring Deliveries. In DS you can create a new Delivery and select from any of the converted/migrated Reports. In addition, during the conversion/migration, if a Report has at least one Access Right mapped to it, then for that Report, there will be a Recurring Delivery created in DS and the Access Right will be added as an Output Preference to the Recipient to whom that access right belongs to with a tag added towards this Recurring Delivery.

When there are multiple access rights mapped to the same Report, then one Recurring Delivery is created for that Report, and all the unique Recipients are added to that Recurring Delivery and for each unique access right for a Recipient, one Section code will be tagged to the Recipient's Output Preference.

A Recurring Delivery for a Report will only be created when there is at least one access right mapped to it which has either an email or a print distribution enabled. In case if neither email nor print distribution is enabled, then a recurring delivery will not be created in DS, but that Report will be added into DS records for you to be able to use it to create fresh delivery from the DS screen.

- Distribution Groups

The Distribution Groups from Mobius VDR server get converted into a Deferred Delivery for each of the Distribution Group that has at least one distribution (email or print) enabled Access Right mapped to it. If a Distribution Group does not have any distribution enabled access right, then no Deferred Delivery will be added in DS for that Distribution Group and that Distribution Group will NOT be stored into DS records.

- Templates

In Mobius VDR Server, for a Distribution Group (print or email), in the Packet Customization section we may have given a sub-directory name which has the required template text files. Each of these unique sub-directory names will get converted as Templates in DS. The sub-directories from an Email Distribution Group will be added as Email Templates and those from Print Distribution Groups will be added as Print Templates. You can also create a new template entirely from DS screen as well.

After conversion, if any new sub-directory is added to a Distribution Group, then that will not be added into DS records.

Recipients and Recipient Groups

The Users in Mobius VDR are called Recipients in DS and the User Groups in Mobius VDR are called as Recipient Groups in DS. During conversion/migration, each User and User Group along with their distribution enabled access rights will be added into DS as Recipients and Recipient Groups, and their access rights added as Output Preferences and tagged to a Recurring/Deferred Delivery as applicable.

After conversion, any new User or User Group added in Mobius Server will be added into DS as Recipient or Recipient Group either by manually clicking the Sync button or automatically at midnight. During this addition, the access rights will not get added as Output Preferences in DS.

Also, after conversion, if any User or User Group is deleted from Mobius Server, then the same Recipient or Recipient Group will not be deleted from DS. To get the Recipient or Recipient Group deleted from DS, we need to run an XML utility which will delete the Recipient from DS.

- Report Version/Ingestion

A new Report Version/Ingestion that is created in Mobius Server, will get added within 1 minute of its creation to DS. Upon entering DS, it will trigger any Recurring Deliveries that were created with the underlying Report. A Delivery will be triggered in DS only if the Ingestion is NOT of Deferred Distribution Type. For an Ingestion which is of Deferred Distribution Type, it will be added into DS records and be available for triggering/creating

any ad-hoc or one-time Delivery from DS.

- Report Access Rights

Report Access Rights in VDR can be viewed from either the Report or Users as below:

1. Report > Report ID > Report access rights > Access right record having details like Recipient ID and Section. Template is based on sub-directory defined in the Distribution Group.
2. Recipients and groups > Recipient ID > Report access rights > Access right record having details like Report ID and Section. Template is based on sub-directory defined in the Distribution Group.

The above representations can also be viewed from DS, but their representation is different as below:

1. Deliveries > Delivery Name pertaining to the Report > Recipient > Output Preference which has details about the Section(s) and Template to be used.
2. Recipients and Groups > Recipient ID or Group ID > Output Preference which has Template details > Delivery Tag based on the Report > This will have the Section(s) details.

- Devices

The Devices in the Mobius Server get converted as Printers in DS. For every unique Mobius Server host there is a Print Agent which works as a medium between the Mobius Server and DS during the conversion/migration process to get the Devices and Template related details. After conversion/migration all the Devices are stored as Printers on the Print Agent. To perform a Print Distribution from the DS, you need to have the Print Agent up and running so that the Distribution request can be sent to the Printer as defined in the Delivery.

- Deliveries

A Delivery is where you configure what content (source), in which format (output template), when, where (output channel – email/print), and to whom (Recipient) it is to be distributed. In DS, there are 3 types of Deliveries that can be created – Recurring Delivery, Deferred Delivery and One-Time/Ad-hoc Delivery. Any of these Deliveries can be triggered to be released immediately or on a scheduled time. For each Delivery instance there will be packets created for each Recipient based on the number of Output Preferences available for each Recipient and depending on the Email Packing option selected (in case of email-based delivery distribution).

Recurring Delivery: This delivery type will trigger a new Delivery instance every time a new Report Version/Ingestion is done. A Recurring Delivery is created during conversion/migration process and can also be created freshly from DS screen as well.

Deferred Delivery: This delivery type will NOT trigger a new Delivery instance for every new Report Version/Ingestion is done. A Deferred Delivery is created during conversion/migration process and can also be created freshly from DS screen as well. This type of Delivery can be used to trigger a One-Time Delivery by explicitly selecting the Ingestion(s) required from the DS screen to process the Delivery.

One-Time/Ad-hoc Delivery: This delivery type will trigger a new Delivery instance based on the Report and its Ingestion(s) selected. This type of Delivery is NOT created during conversion/migration process. They can only be created either freshly or from any existing Recurring or Deferred Delivery definitions from the DS screen.

- Output Channels

This section helps to configure the Email Server settings and manage Printers.

Email: This screen is like the Mobius VDR Enterprise Administrator > Instance Properties > Email Distribution > Java Mail configuration screen. In DS, apart from configuring the Email SMTP server setting you can also send a test email to check if the SMTP server details provided are working.

Print: This screen shows a list of available Print Agents. The first Print Agent in the list is selected and all the available Printers are displayed. You can add a new Printer or modify an existing one from this screen.

Print Agent: This is the most important module for the DS. Print Agent is part of the Mobius VDR Server installation and must be configured on the Mobius VDR Server side. If the Print Agent is not configured or enabled, then the conversion/migration will Fail.

- Distribution Status

This screen is to keep track of the progression of each Delivery Instance and its packets. This screen is not available in Mobius Server and is a fresh feature in DS. This screen has 2 views – Delivery (instance) View and Recipient (individual packet) view.

- Points to remember

After conversion, it is advised not to rename the Content Repository name from the Mobius Administrator screen.

After conversion, if a new Report is added in Mobius VDR server and a few Access Rights are also added to this Report, then in DS only a record for the new Report will be added. There will not be any Recurring Delivery created even if there are distribution enabled access rights mapped to it.

After conversion, if a new Distribution Group is added in Mobius VDR server, then this Distribution Group will not be available in DS records and no Deferred Delivery will also be added in DS for this Distribution Group.

Distribution Services – Risks and Mitigations

Below are some possible risk conditions that might come up while using/configuring the Distribution Services (DS).

- Attempting to convert/migrate to DS directly on a production server is not advisable as there might be certain conditions or data on production which may get missed because of the content that it contains. Below are certain ways to mitigate this risk.
 - Attempt/Test the conversion on a test machine first.
 - On the production machine, do a conversion simulation using the Simulate Conversion option – this will give you a set of results which can indicate if the actual conversion if attempted, will succeed, or fail. Running conversion simulation will perform a conversion – without storing or converting any data on DS records – and provide only a result which indicates whether the actual conversion, if attempted, will succeed, or fail. If the result says succeed/pass, then you can proceed with actual conversion by clicking the Convert button. If the result says failed, you can contact the CS team with the failure information and downloaded results and the CS team will advise you the next steps.
- As DS does not hold the Report Access Rights, and these are managed in the Mobius VDR Server side, we must make sure any changes being made to the access rights in the Mobius Server are also done to the applicable Recipient in DS side as well.

Checklist of items to perform before starting a Conversion/Migration

Before starting a conversion/migration of a Content Repository make sure each of the below items in the checklist have been ticked off.

- ☐ Upgrade to / install Mobius VDR Server 11.2.10 or above.
- ☐ The Print Agent is enabled and running on the Mobius VDR server. This step is necessary even if you do not intend to use Print Distribution. Without the Print Agent up & running, conversion/migration in DS will fail.
Note: You can check the topic on how to enable and check if Print Agent is running from [here](#).
- ☐ Upgrade to / deploy Mobius View 11.2.11 or above.
- ☐ In the Mobius Administrator UI, add a content repository of type Mobius. For a smooth conversion, it is advised that while adding a Mobius Host, either use the IP address of the host or if using host name, then have the hostname in lowercase. Once added, it takes up to three minutes for the repository to show up on the Distribution Services (DS) landing page.
- ☐ After the repository is visible on the DS landing page, it will have the Convert and Simulate Conversion action buttons enabled on it (provided no other conversion/rollback/simulation is in progress).
- ☐ As a first step, click the Simulate Conversion button. Depending on the underlying data on the document server, the simulation completion time varies. Once the simulation is completed, the landing page will auto-refresh and you will be able to see a Simulation Results button. Click that button and it will show some meta-data related to the conversion/migration process. You can click the Download Results button to download this meta-data file. Share the same with ASG/Rocket CS team.
- ☐ CS team will analyze the meta-data and let you know if you are good to proceed with the conversion/migration process.
- ☐ Based on the CS team's suggestion, you can then click the Convert button which will trigger the conversion/migration process, which will take time depending on the underlying data in the document server. You will be able to track the conversion/migration status through the progress bar and clicking on the Refresh button available on the Repository Migration table.

Note: A Conversion Simulation feature is underway where-in upon clicking the Simulate Conversion button, it will perform a conversion – without storing or converting any data on DS records – and provide only a result which will indicate whether the actual

conversion, if attempted, will succeed, or fail. If the result says succeed/pass, then you can proceed with actual conversion by clicking the Convert button. If the result says failed, you can contact the CS team with the failure information and downloaded results and the CS team will advise you the next steps.

After Conversion/Migration

After a successful conversion/migration below are a few important points to follow on the Distribution Services (DS) side.

Num	Activity Description	What/How to do in DS
1	Configure Email SMTP server details	Configure the Email SMTP server settings from the Output Channel > Agent Email > Email Server Configuration. Once you have set the SMTP server details on this screen, you can also send out a Test Email to make sure the configurations are working.
2	Adding a new Report	To add a new Report into DS records so that it can be used in Delivery creation, you can simply add the new Report from Mobius Server UI. Once added, it will get automatically added into DS records as well.
3	Adding a new Recipient in DS	To add a new Recipient or Recipient Group in DS records, you can simply add the new User/User Group in Mobius VDR/Server and then come to the DS home page and navigate to 'Recipients and Groups' tile and from that screen, click the 'Sync with Mobius Server' option. This will add the newly added Users/User Groups into DS records as Recipients. Point to note here is, Sync will only add new User/User Groups, it will not perform any modification or deletion related changes that are made in Mobius VDR/Server.
4	Adding a new Report Access Right to a User	Report Access Rights are treated in the form of Recipient Output Preferences in DS. So first, you must add the Report Access Right into Mobius VDR/Server and then create a new Recipient Output Preference in DS which matches with the details added in the Mobius VDR/Server.
5	Modifying Recipient's email address	Just by changing the Users email address in Mobius VDR/Server and Syncing from DS will not bring in the new email address to DS records. Any change to the Recipient in Mobius VDR/Server should also

		be done in DS Recipient records. So, to change the email address, update the Recipient record from the DS > Recipients and Groups screen.
6	Deleting a Recipient	You cannot delete a Recipient from the DS screens. Even when you delete the User from Mobius VDR/Server, the related Recipient will still show in DS. To delete a Recipient, you can run the XML Recipient Utility which can delete a Recipient and add a new Recipient to DS after a successful repository conversion.

- You can follow the [Quick Start Guide](#) to perform basic Email or Print Distributions.
- During the Distribution, details about any failing Delivery packets can be seen from the Distribution Status > View by Recipient screen > Clicking on the failing Recipient's packet.

Common Issues & Troubleshooting

Below is a list of commonly seen issues and how to trouble shoot them.

- If the email Delivery packet shows that content is retrieved but the packet is not getting delivered, then check if the Email SMTP server details have been provided in the Output Channels > Agent Email screen.
- If the email Delivery packet is completed but you are not receiving any email in your mailbox, then check if the Email SMTP server details provided in the Output Channels > Agent Email screen are correct and working by sending a Test Email.
- If the print Delivery packet shows that content is retrieved but the packet is not getting delivered, then check if the Printer associated with the recipient's packet is valid and not a Hold Queue. If it's a Hold Queue, then changing it to a valid printer will enable the stuck packet to proceed.
- If the print Delivery packet is completed, but you are not receiving the print output, then check if the data in the print template files is provided correctly and that there are no blank spaces or empty lines at the end of the template files.

- If any packet gets failed, you can get the failure reason by clicking on the packet and checking the Activity Logs section shown on the right panel. Most of the times the failure reason is self-explanatory. In case if the reason is not being understood, you can reach out to the Dev team.
- If any Delivery instance gets failed and you are not able to see any packets related to that Delivery instance being created, you can reach out to the Dev team.
- For any errors related to Print Agent, check for the logs present on the machine where the Mobius VDR Server is running. The logs are available in the path: <Mobius VDR Server Installation Directory>\vdrsoa\logs
- For any errors related to Distribution Services, you can check the mobius.log file.

Note: While contacting the Dev team, kindly provide the environment details along with the application.yaml file of both Mobius View and Mobius VDR Server and the log files – Print Agent logs (if applicable), mobius.log and Mobius View Tomcat logs.

