



MigrationStudio
FAST-TRACK YOUR MIGRATION

Extending MigrationStudio v7.x for Virtual Desktop Environments

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1 Introduction

With public and private/hybrid cloud offerings becoming more mainstream, organisations are incorporating virtual desktop environments within the IT portfolio to underpin strategic initiatives, such as flexible working and business continuity. Whether delivering a pure cloud-based desktop solution or offering a hybrid of traditional and virtualised services, the project becomes more complex due to the diverse nature of technologies employed.

MigrationStudio provides tooling that enables organisations to accelerate Windows client, Windows Server and Exchange/Office 365 migrations, and significantly reduces the cost and time taken to deliver transformation projects. By leveraging MigrationStudio's extensible framework, project managers can also confidently track users, applications, traditional end-user devices and virtual desktop targets throughout the migration.

This white paper details the process of extending MigrationStudio to cater to elements that are specific to a virtual desktop migration, such as:

- User identity synchronisation
- Cloud domain properties
- Remote protocol preferences
- Thin client hardware types
- User profile conversion and mapping
- Target host pool and usage type
- VDI OS types
- New application types
- GPU requirements

1.1 Assumptions

This whitepaper was written on the foundation of the following assumptions:

- The reader has a working knowledge of MigrationStudio
- MigrationStudio has been installed and is currently importing data
- An administrator account will be used to implement the recommendations in this document
- MigrationStudio has not been modified since installation

2 Customisation

2.1 Updating Dropdown List Options

Many of the modules within MigrationStudio can be configured with custom values to match an organisation's workflow. Some of these options will need to be updated to accommodate the new information that will be captured to support a virtual desktop migration:

- Application Virtualisation Packages
- Application Packaging Target OS Types
- User Machine Types

All dropdown items are accessed and updated using the same process:

- Switch to the **Admin** view (1) and choose **Initial Setup** (2) from the vertical menu on the left.
- Click **Dropdown List Items** (3) from the section tabs.
- Select **Click here to add new item** (4) and enter details as required for the relevant section.

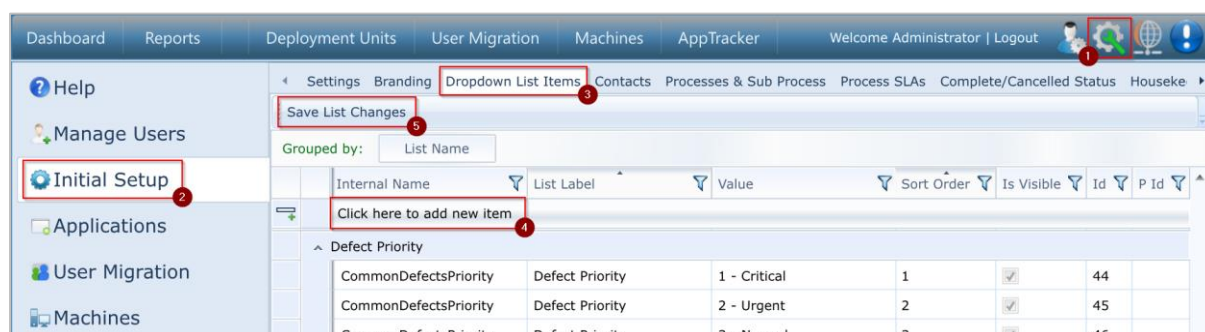


Figure 1 - Extending the drop-down menus

The configuration is also provided as a Project Template on the MigrationStudio website:

<http://support.migrationstudio.co.uk/a/solutions/articles/14000113323>

2.1.1 Application Virtualisation Packages

Desktop virtualisation projects will introduce new application virtualisation and packaging techniques to the estate, such as RemoteApp and MSIX. To capture these technologies in MigrationStudio, follow the process above to access the **Dropdown List Items** tab and use the steps below to add each new package type:

- Select **Click here to add new item** (4) and enter the following details:
 - **Internal Name:** AppPackageType
 - **Value:** MSIX
 - **Sort Order:** Any*
 - **Is Visible:** Ticked
- Leave other values as default.
- Click **Save List Changes** (5) and repeat the steps to add the next new package type.

* The **Sort Order** field uses a numeric value to determine the position of an item in the dropdown. An item with a **Sort Order** of 0 will appear at the top. The numbers should be adjusted to achieve the desired order in the dropdown.

For example:

	Internal Name	List Label	Value	Sort Order	Is Visible	Id
	Click here to add new item					
>	AppPackageType	App Package Type	Application	1	<input checked="" type="checkbox"/>	1
	AppPackageType	App Package Type	MSI	2	<input type="checkbox"/>	2
	AppPackageType	App Package Type	Exe	3	<input type="checkbox"/>	3
	AppPackageType	App Package Type	MSIX	3	<input checked="" type="checkbox"/>	110
	AppPackageType	App Package Type	Web	4	<input type="checkbox"/>	100
	AppPackageType	App Package Type	Mailbox	5	<input checked="" type="checkbox"/>	101
	AppPackageType	App Package Type	RemoteApp	6	<input type="checkbox"/>	102

Figure 2 - Adding virtualisation-specific package types

2.1.2 Update Application Packaging Target OS Types

Virtual desktop solutions often encompass heterogenous desktop types, which increases the packaging complexity during the migration and afterwards, when the project enters BAU. Any additional desktop types that will be used in the project should be added to MigrationStudio.

While still in **Dropdown List Items** from the previous step, add the additional OS types to mark application compatibility as required by the project:

- Select **Click here to add new item**.
- Choose **AppCompatibility** as the **Internal Name**.
- Enter **Windows 10 MSE** as the **Value**.
- Set the **Sort Order** to **0** (zero).
- Ensure that **Is Visible** is ticked.
- Press the **Enter** key on the keyboard to enter the additional OS types.
- Repeat the process as required to add the remaining target OS types, updating **Value** and **Sort Order** as appropriate.
- Once finished, click **Save List Changes**.

For example:

Internal Name	List Label	Value	Sort Order	Is Visible	Id
Click here to add new item					
App Compatibility					
AppCompatibility	App Compatibility	Windows 10 MSE	0	<input checked="" type="checkbox"/>	103
AppCompatibility	App Compatibility	Windows 10	1	<input checked="" type="checkbox"/>	7
AppCompatibility	App Compatibility	Windows 8.1	2	<input checked="" type="checkbox"/>	8
AppCompatibility	App Compatibility	Windows 8	3	<input checked="" type="checkbox"/>	5
AppCompatibility	App Compatibility	Windows 7	4	<input checked="" type="checkbox"/>	4
AppCompatibility	App Compatibility	Windows Server 2019	5	<input checked="" type="checkbox"/>	104
AppCompatibility	App Compatibility	Windows Server 2018	6	<input checked="" type="checkbox"/>	105
AppCompatibility	App Compatibility	Windows Server 2012 R2	7	<input checked="" type="checkbox"/>	106

Figure 3 - New operating systems for Application Compatibility

2.1.3 Update Machine Target OS Types

MigrationStudio will track the type of machine that is to be allocated to a user during a migration. Physical machines are catered for out of the box and should be updated to include the virtual variant that will be used during the migration.

While still in **Dropdown List Items** detailed in 2.1 - *Updating Dropdown List Options*:

- Select **Click here to add new item**.
- Choose **UserMachineType** as the **Internal Name**.
- Enter the virtual desktop type in the **Value** field (e.g. W10 VD).
- Set the **Sort Order** to the next available value.
- Ensure that **Is Visible** is ticked.
- Press the **Enter** key on the keyboard and repeat the process as required to add the remaining machine types, updating **Value** and **Sort Order** as appropriate.
- Once finished, click **Save List Changes**.

Internal Name	List Label	Value	Sort Order	Is Visible	Id
Click here to add new item					
Machine Type					
UserMachineType	Machine Type	Desktop	1	<input checked="" type="checkbox"/>	70
UserMachineType	Machine Type	Laptop	2	<input checked="" type="checkbox"/>	71
UserMachineType	Machine Type	W10 VD	3	<input checked="" type="checkbox"/>	107
UserMachineType	Machine Type	W10 VD - Multi-session Environment	4	<input checked="" type="checkbox"/>	108
UserMachineType	Machine Type	Server Multi-session Environment	5	<input checked="" type="checkbox"/>	109

Figure 4 - New target machine types

2.2 Create a Blueprint for Profiles

MigrationStudio uses a variety of data sources – Active Directory, inventory systems and HR databases – to create the information that is used to drive and accelerate migration projects. Blueprints are a way of organising and combining this data to add context to users, applications, or devices. For example, it is possible to filter applications that have been used by the Finance team in the London campus.

Blueprints are also useful for tracking objects in MigrationStudio. Within a user profile migration, an organisation might want to track who has been migrated and who remains on a traditional profile. This example will use two Blueprints to allow administrators to quickly view this information and filter by profile type:

- Ensure the **Admin** view (1) is selected.
- Choose **Blueprints** (2) from the vertical menu on the left.
- Click the edit icon (3) next to **Project Blueprints**
- Select **New Folder** (4) from the context menu.

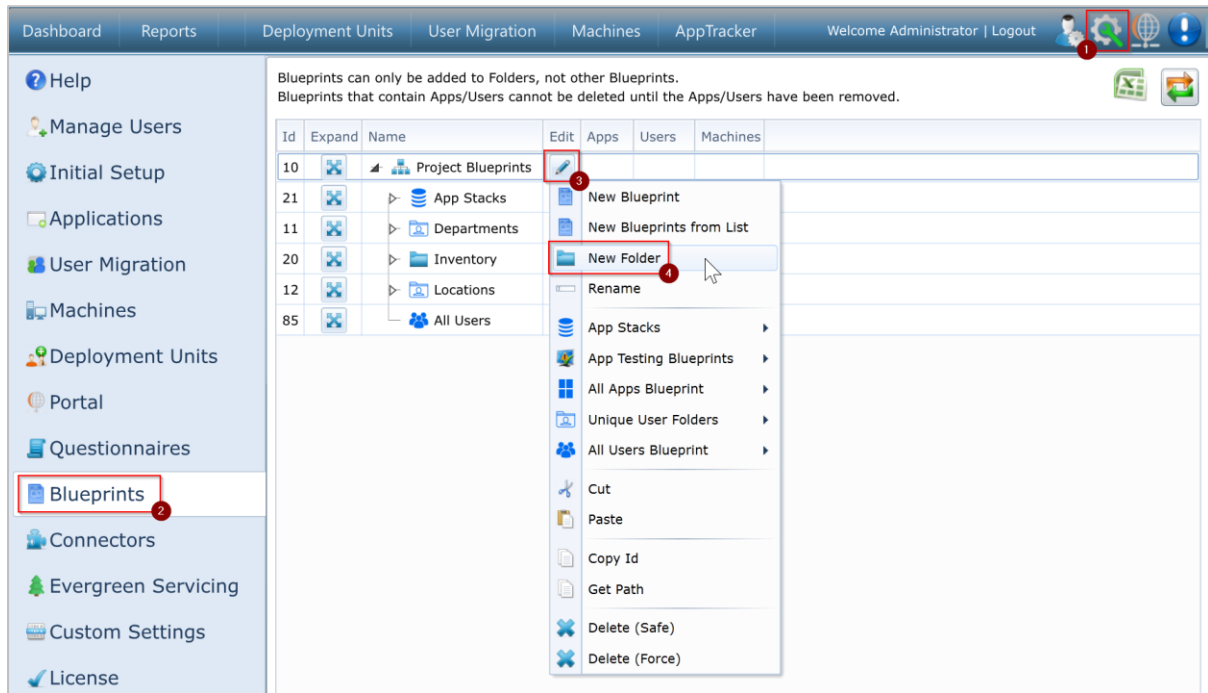


Figure 5 - Creating a new Blueprint folder for user profiles

When the **New Folder Name** dialog appears:

- Type *User Profiles* as the **New Folder Name**.
- Click **Confirm & Close** to save the new folder.

If users will only have one profile during the migration, set the **User Profiles** Blueprint folder as a unique user folder to prevent users from being a member of multiple Blueprints:

- Click the **Edit** (pencil) icon (1) to the right of the **User Profiles** folder created in the previous step. (Image overleaf.)

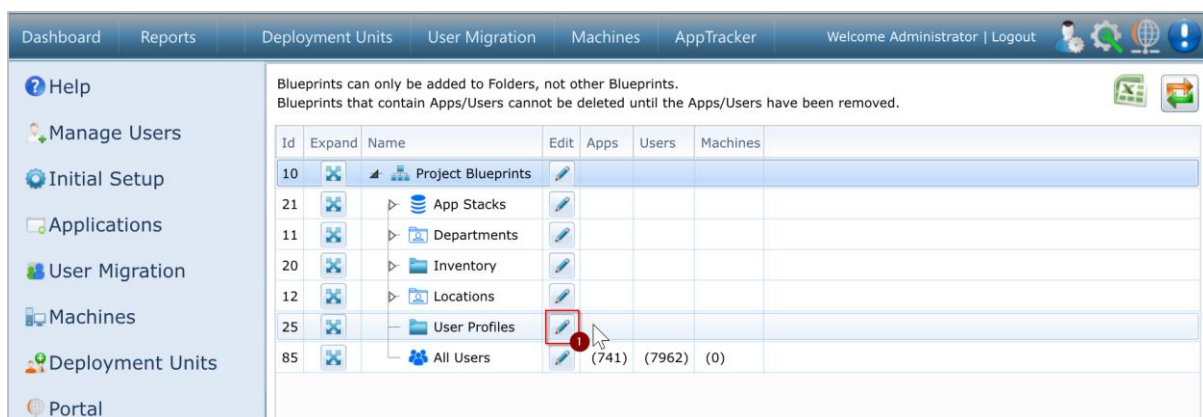


Figure 6 - Using the edit function to create a new Blueprint

- Choose **Unique User Folders** from the context menu and select the **Set as Unique User Folder** sub-option.
- Click **OK** when prompted to confirm that this folder should be set as a Unique User Folder.

Create two new Blueprints – Traditional and Virtual:

- Click the edit (pencil) icon to the right of the **User Profiles** Blueprint Folder.
- Choose **New Blueprint** from the context menu.
- Enter **Traditional** in for the **New Blueprint Name**.
- Click **Confirm & Close** to save the change.
- Repeat the process to create a Blueprint called **Virtual**.

If following the example within this document, the Blueprint structure should look like the screenshot below:

Id	Expand	Name	Edit	Apps	Users	Machines
10		Project Blueprints				
21		App Stacks				
11		Departments				
20		Inventory				
12		Locations				
24		User Profiles				
131		Traditional		(0)	(0)	(0)
132		Virtual		(0)	(0)	(0)
85		All Users		(741)	(7962)	(0)

Figure 7 - An example of the new Blueprints required for user profiles

The configuration is also provided as a Project Template on the MigrationStudio website:

<http://support.migrationstudio.co.uk/a/solutions/articles/14000113323>

2.3 Virtualisation Specific Tab: Users

Migration information pertaining to users – for example, their contact information, migration details and applications required – is stored in the **User Migration** module within MigrationStudio. This provides the detail required to plan, manage, and migrate a user to a new desktop environment. The

example in 4.1 - *Appendix A: Examples of The User-Specific Virtualisation Tab* illustrates how the tab could be extended to capture the following details:

- Active Directory Future State,
- Desktop Virtualisation Preferences,
- User Profile Solution and Migration Status.

The following section demonstrates the steps that are required to capture this information - creating a new custom form and populating it with the appropriate questions – allowing the project team to create a custom workflow that reflects the end-user organisation.

Information in the new form can be entered manually on a user-by-user basis, or by using the bulk data import feature. Further information about data imports can be found in [Solution Article 14000106085](#).

The configuration outlined below is also provided as a Project Template on the MigrationStudio website:

<http://support.migrationstudio.co.uk/a/solutions/articles/14000113323>

2.3.1 Enable the Custom Tab

MigrationStudio offers the ability to create two types of custom tabs: standard and hidden. Both types enable administrators to create custom panels to collect and present information, however, access to the hidden tabs is disabled by default and should be enabled on a per-user basis. User-specific information that will be used within the desktop virtualisation project will be stored in a custom hidden tab due to the sensitive nature of the information collected.

To create a new tab specific to the virtualisation component of the migration:

- Switch to the **Admin** view (1) and select **User Migration** (2) from the vertical menu on the left.
- Open the **Tab Headers / Visibility** tab (3).
- In the **Hidden Tab 1** field (4), enter **Virtualisation** as the name of the new tab.
- Ensure that **Is Visible** (5) is enabled and click **Save** (6) to enable the new tab.
- Note: the browser will need to be refreshed before the tab is visible in the UI.

(Image overleaf.)

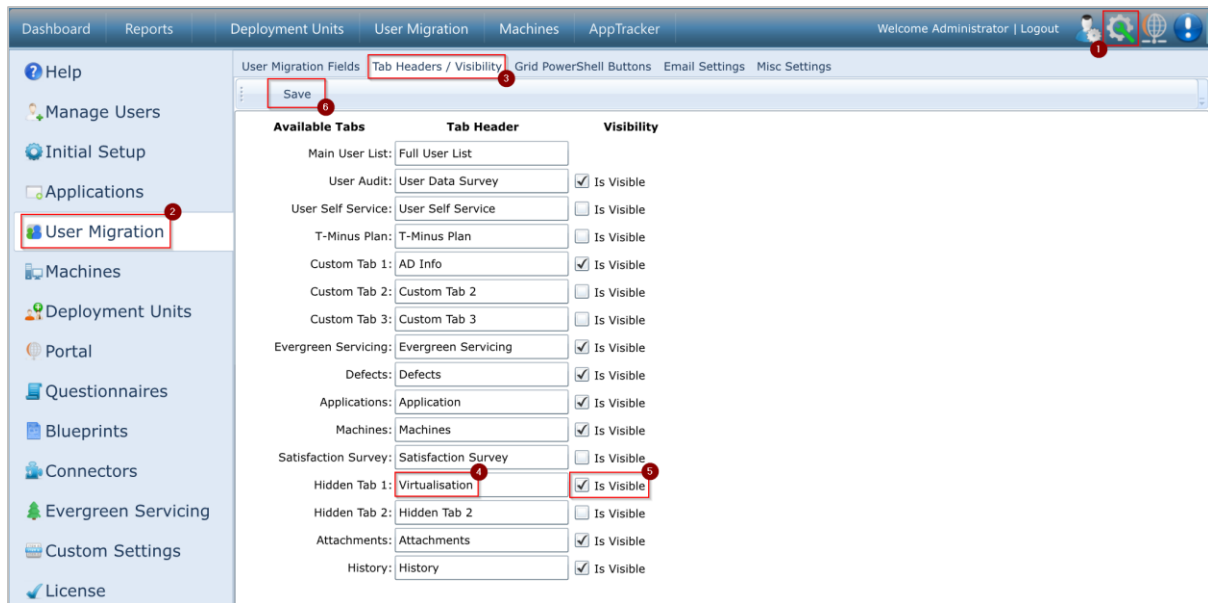


Figure 8 - Creating a custom tab for user virtualisation settings

2.3.2 Populate the Custom Tab

After the new tab has been created, it needs to be populated with fields to capture the virtualisation details:

- Switch to the **Admin** view (1) and select **Questionnaires** (2) from the vertical menu on the left.
- Expand the **Questionnaire** dropdown and choose **User Hidden Tab 1** (3).
- Rename **Display Name** to **Virtualisation** (4) and enable **Display History in Tabs** (5).
- Click **Create Sub-Tab** (6) to create the first set of questions.
- Type the title for this section, for example **User Profile**, when prompted to enter a **Sub-Tab Title** and click the **Create Sub-Tab** button.

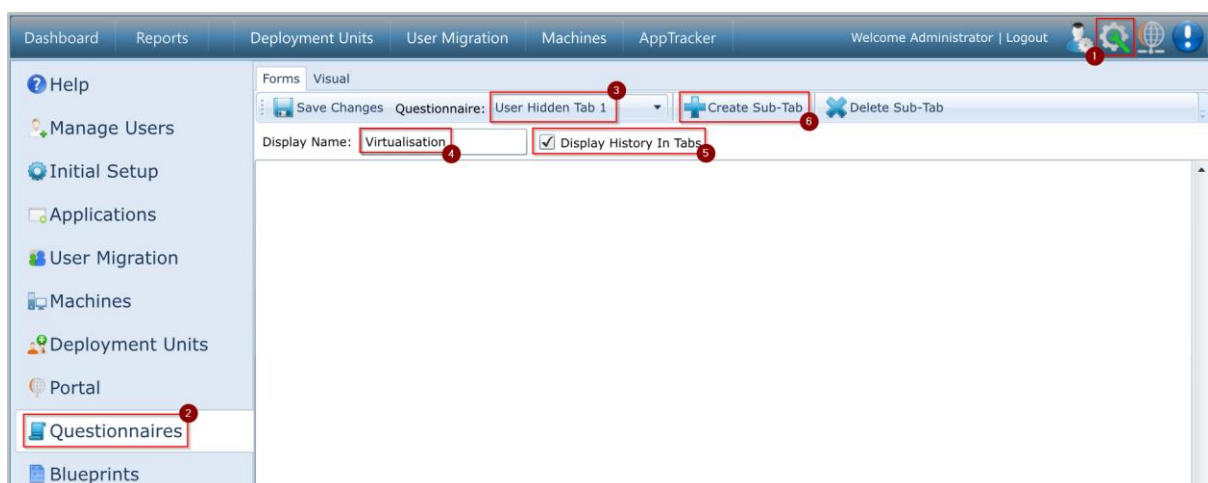


Figure 9 - Menu options for the custom tab

2.3.2.1 Sub-Tab Settings

Each sub-tab that is created will have meta properties associated to it that can be edited to change how the information appears to the user:

- **Sub-Tab Header:** The questions can be grouped into relevant sections, e.g. Active Directory or User Profile. The **Sub-Tab Header** is the friendly name that will be used to create a new tab in the side menu. This option is useful to separate areas that have a high number of questions.
- **Display Order:** The order in which each sub-tab is displayed on the screen is controlled by the **Display Order**. This is a numerical value where lower numbers appear higher in the order. For example, if five sub-tabs have been created, 0 (zero) would place a sub-tab at the top of the screen, whereas 5 would be at the bottom.
- **Is Visible:** For a sub-tab to appear to the user, the **Is Visible** check box needs to be selected. Disabling this property will hide the tab from MigrationStudio users, which might be desirable while new sub-tabs are in development.

The screenshot shows the 'User Profile' sub-tab settings. At the top, there's a 'Display Name' field with 'Virtualisation' and a checked 'Display History In Tabs' checkbox. Below this, the 'User Profile' section is highlighted in yellow. It contains a 'Sub-Tab Id' field with '0', a 'Sub-Tab Header' field with 'User Profile' (marked with a red circle 1), a 'Display Order' field with '0' (marked with a red circle 2), a 'Rebuild Display Order' button, and an 'Is Visible' checkbox which is checked (marked with a red circle 3). Below these fields is a table with columns: Display As, Question Text, Options, Tool Tip, Order, VIS, RO, HST, QId. The table has two rows: 'Text Line' with 'First Question Text' and 'Text Line' with 'Second Question Text'. A link 'Click here to add new item' is above the table.

Display As	Question Text	Options	Tool Tip	Order	VIS	RO	HST	QId
Text Line	First Question Text			0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
Text Line	Second Question Text			1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0

Figure 10 - Editing the properties of a custom tab

2.3.2.2 Question Options

To start populating the form with questions, click the **Click here to add new item** button.

- **Display As** allows the following entry types:
 - **Header:** Displays text as a heading, not an input field.
 - **Info:** Displays text as an information block, not an input field.
 - **Text Line:** Input field to allow a single line of text to be entered.
 - **Text Block:** Input field to allow a large area of text to be entered.
 - **Dropdown:** Predefined inputs options presented as a dropdown menu. Only one option can be selected by the end-user.
 - **Dropdown W/Filter:** for use by MigrationStudio developers
 - **Radio Buttons:** Predefined input options presented as radio buttons. Only one option can be selected by the end-user.
 - **Radio Buttons W/Filter:** for use by MigrationStudio developers
 - **Checkbox(s):** Predefined input options presented as check boxes to enable a multiple-choice response from the end-user.
 - **List Box:** Predefined input options presented as a scrollable list box.
 - **Date Picker:** Graphical view to allow a user to select a date.
 - **Time Picker:** Graphical view to allow a user to select a time.
 - **Date/Time Picker:** Graphical view to allow a user to select a time and date.
 - **Number Integer:** Numerical input that allows a whole number.
 - **Number Decimal:** Numerical input that allows a decimal response.

- **Spacer:** Used to provide clear line breaks on the page. Although white space is displayed on the final output, text will be required in the **Question Text** field before the administrator can continue.
- **Hyper Link:** Provides a clickable link for users to use.
- **(API) PowerShell Button/PowerShell Table/HTML Block/Progress Bar/Settings Table/Password:** for use by MigrationStudio developers
- **Question Text:** The text that will appear in the **Header**, **Info** or question fields.
- **Options:** The predefined options for input types that have multiple responses available – **Dropdown**, **Radio Buttons**, **Checkbox(s)** and **List Box** – should be defined in the **Options** field. Options should be separated by the pipe symbol (|). For example, **Rarely|Occasionally|Every Day**.
- **Tool Tip:** Additional information can be provided to users via the **Tool Tip** field. This should be information specific to the response – for example, format – rather than an instruction. Longer explanations should be provided using the **Info** display type.
- **Order:** This numerical value controls the order in which each entry is displayed in the list, 0 (zero) being the highest placed item.
- **Is Visible:** Controls whether the entry is visible to the user. Tick the box to make the item visible, deselect to hide.

For example, the following sample uses **Header**, **Info**, **Spacer**, **Text Line** and **Radio Buttons**.

Display As	Question Text	Options	Tool Tip	Order	VIS	RO	HST	QId
Header	User Profile Readiness			0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1030
Info	Revisit this panel as the user profile progresses through the n			1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1031
Spacer	Spacer			2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1032
Text Line	Profile Location		For example:	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1033
Radio Buttons	Profile Type	FSLogix OneDrive Liquidware		4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1034

Figure 11 - Populating the custom tab with fields

An example of the settings and the end-user's view of the tab can be found in 4.1 - Appendix A: Examples of The User-Specific Virtualisation Tab.

2.3.3 Limit Access to User Settings

The permission that allows access to the user-specific virtualisation tab should be explicitly applied to all users that require access:

- Ensure that the **Admin** view (1) is selected and select **Manage Users** (2) from the vertical menu on the left.
- Choose the user that requires access to the hidden tab from the main grid (3).
- In the **Migrations (Users & Machines & DUs)** panel (4), scroll down to **User Migrations** and enable **Access Hidden Tab 1** (5).
- Click the **Save Roles** (6) button towards the top of the page to apply the new permissions.

(Image overleaf.)

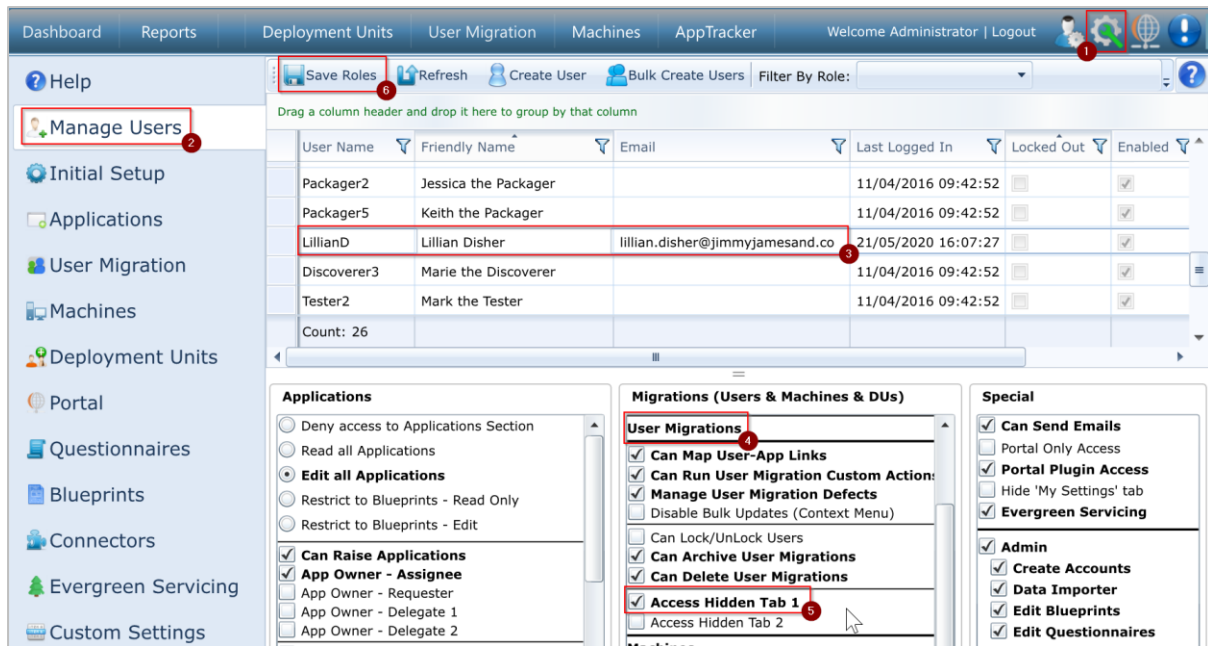


Figure 12 - Assigning access to User Hidden Tab 1

2.3.4 Managing User Profiles

Largescale user profile migrations can be managed in MigrationStudio by extending the default processes. This has the advantage of reflecting the state of the profile for project reporting, but also provides trigger points for MigrationStudio installations leveraging automation via the Evergreen Service Module (ESM). For example, with ESM it would be possible to:

- Provision profile storage once the target technology has been identified,
- Apply permissions on the user's profile storage,
- Automatically convert the user profile.

Installing the project pack that accompanies this document will create an additional component within the **Virtualisation** panel to track a profile migration. This structure should be modified to reflect the workflow deployed within the organisation. For example:

- 1. Profile Identified
- 2. Storage Preparation
 - Target Identified
 - Permissions Applied
- 3. Migration
 - Conversion in Progress
 - Scheduled
 - Conversion Complete
 - Profile Validated
 - User Session Mapped
- 4. Complete
- Mandatory Profile

2.4 Virtualisation Specific Tab: Machines

Information about the end-user devices that are in scope of the migration – for example, hardware configuration, target users and inventory data – can be found in the **Machines** module within MigrationStudio. This module could be further extended to capture any relevant information relating to a virtual desktop environment.

The following section demonstrates the two steps that are required to capture this information - creating a new hidden custom tab and populating it with the appropriate questions – allowing the migration team to create a custom workflow that reflects the hardware requirements for the project.

Machine details can be entered manually on a device-by-device basis, or by using the bulk data import feature. Further information about data imports can be found in [Solution Article 14000106085](http://support.migrationstudio.co.uk/a/solutions/articles/14000106085).

The configuration is also provided as a Project Template on the MigrationStudio website:

<http://support.migrationstudio.co.uk/a/solutions/articles/14000113323>

2.4.1 Enable the Custom Tab

To create a new tab specific to the virtualisation component of the migration:

- Switch to the **Admin** view (1) and select **Machines** (2) from the vertical menu on the left.
- Open the **Tab Headers / Visibility** tab (3).
- In the **Hidden Tab 1** field (4), enter **Virtualisation** as the name of the new tab.
- Ensure that **Is Visible** (5) is enabled and click **Save** (6) to enable the new tab.
- Note: the browser will need to be refreshed before the tab is visible in the UI.

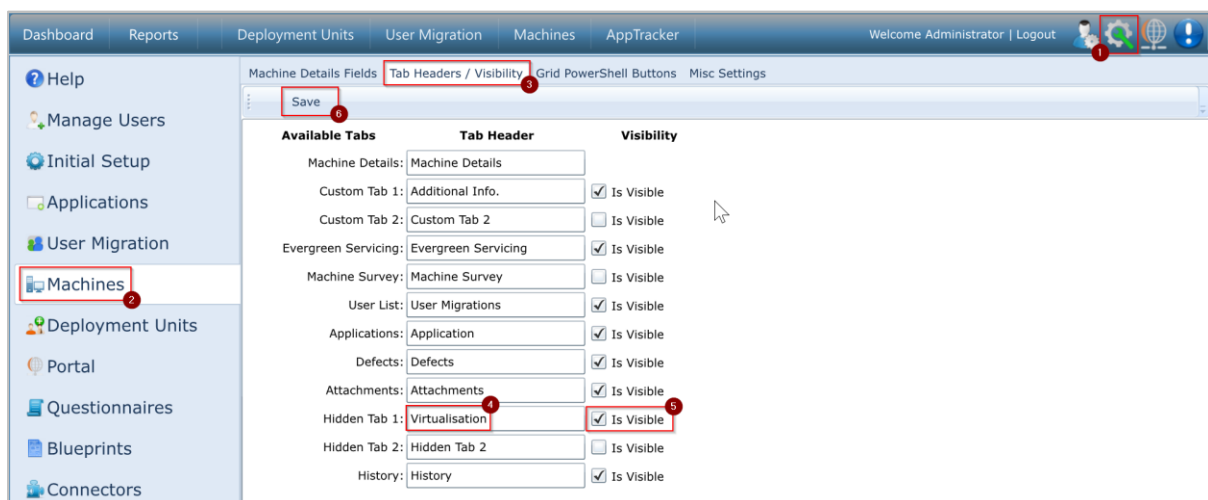


Figure 13 - Creating a custom tab to collect hardware virtualisation details

2.4.2 Populate the Custom Tab

After the new tab has been created, it needs to be populated with fields to capture the virtualisation details:

- Switch to the **Admin** view (1) and select **Questionnaires** (2) from the vertical menu on the left.
- Expand the **Questionnaire** dropdown and choose **Machine Hidden 1** (3).
- Rename **Display Name** to **Virtualisation** (4) and enable **Display History in Tabs** (5).
- Click **Create Sub-Tab** (6) to create the first set of questions.
- Type the title for this section, for example **Settings**, when prompted to enter a **Sub-Tab Title** and click the **Create Sub-Tab** button.
- Click the **Save Changes** button (7) at the top of the screen.

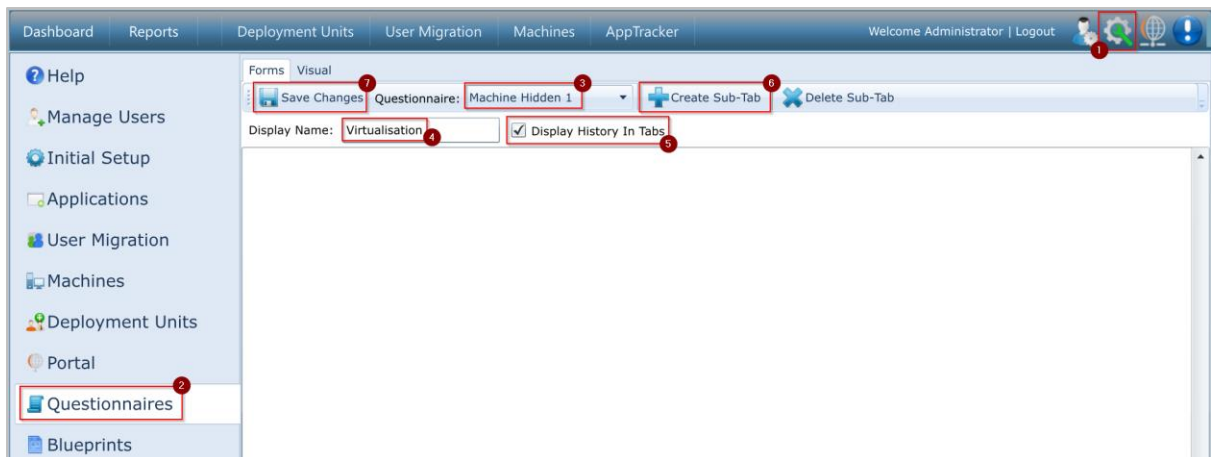


Figure 14 - Custom tab menu options

This will create a new sub-tab that should be populated with the appropriate fields for the project:

Display As	Question Text	Options	Tool Tip	Order	VIS	RO	HST	QId
Click here to add new item								
Text Line	First Question Text			0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0
Text Line	Second Question Text			1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0

Figure 15 - Custom tab meta properties

Further information about the sub-tab settings and question options can be found in:

- Sub-Tab Settings: Section 2.3.2.1.
- Question Options: Section 2.3.2.2.

An example of the settings and the end-user's view of the tab can be found in 4.2 - Appendix B: Examples of The Machine-Specific Virtualisation Tab.

2.4.3 Limit Access to Machine Settings

The settings contained within the machine-specific Virtualisation tab could contain information (such as Active Directory credentials) that should be restricted to specific individuals. Access to the tab should be explicitly granted via the **Admin** module:

- Ensure that the **Admin** view (1) is selected and select **Manage Users** (2) from the vertical menu on the left.
- Choose the user that requires access to the hidden tab from the main grid (3).
- In the **Migrations (Users & Machines & DUs)** panel, scroll down to **Machines** (4) and enable **Access Hidden Tab 1** (5).
- Click the **Save Roles** (6) button towards the top of the page to apply the new permissions.

The screenshot displays the Admin interface with the following components and annotations:

- Top Navigation Bar:** Includes tabs for Dashboard, Reports, Deployment Units, User Migration, Machines, AppTracker, and a user profile section with a 'Logout' link. A red box labeled '1' highlights the user profile area.
- Left Vertical Menu:** Contains links for Help, Manage Users (labeled '2'), Initial Setup, Applications, User Migration, Machines, Deployment Units, Portal, Questionnaires, Blueprints, Connectors, Evergreen Servicing, and Custom Settings.
- Main Grid:** A table of users with columns: User Name, Friendly Name, Email, Last Logged In, Locked Out, and Enabled. The user 'LillianD' (Lillian Disher, lillian.disher@jimmyjamesand.co) is highlighted with a red box labeled '3'.
- Right Panel:** Divided into three sections:
 - Applications:** Includes options like 'Deny access to Applications Section', 'Read all Applications', 'Edit all Applications', 'Restrict to Blueprints - Read Only', 'Restrict to Blueprints - Edit', 'Can Raise Applications', 'App Owner - Assignee', 'App Owner - Requester', 'App Owner - Delegate 1', and 'App Owner - Delegate 2'.
 - Migrations (Users & Machines & DUs):** Contains a 'Machines' section (labeled '4') with checkboxes for 'Can Run Machine Custom Actions', 'Manage Machine Defects', 'Disable Bulk Updates (Context Menu)', 'Can Lock/UnLock Machines', 'Can Archive Machines', 'Can Delete Machines', 'Access Hidden Tab 1' (labeled '5'), and 'Access Hidden Tab 2'. Below this is a 'Deployment Units' section.
 - Special:** Includes checkboxes for 'Can Send Emails', 'Portal Only Access', 'Portal Plugin Access', 'Hide 'My Settings' tab', 'Evergreen Servicing', 'Admin', 'Create Accounts', 'Data Importer', 'Edit Blueprints', and 'Edit Questionnaires'.
- Buttons:** At the top of the main grid area, there are buttons for 'Save Roles' (labeled '6'), 'Refresh', 'Create User', and 'Bulk Create Users'. A filter dropdown 'Filter By Role:' is also present.

Figure 16 - Assigning access to Machines Hidden Tab 1

3 Vendor Specific Changes

3.1 RemoteApp for Microsoft Windows Virtual Desktop

Microsoft RemoteApp is a virtualisation technology that integrates remote applications launched on Windows Server platforms with Windows 7/8.x/10 clients, providing the same look and feel as local applications. The feature leverages other components within the Windows Virtual Desktop (WVD) suite to publish and deliver the applications to target desktops. This configuration can be captured in MigrationStudio to ensure that applications are provisioned correctly during the application readiness and packaging workflow, and to automate delivery to end-users via MigrationStudio ESM.

The following section details the two steps that are required to enable this functionality within MigrationStudio: enabling a custom tab to store the information and populating the tab with the appropriate fields.

Details about RemoteApps can be entered manually on a app-by-app basis, or by using the bulk data import feature. Further information about data imports can be found in [Solution Article 14000106085](http://support.migrationstudio.co.uk/a/solutions/articles/14000106085).

The configuration is also provided as a Project Template on the MigrationStudio website:

<http://support.migrationstudio.co.uk/a/solutions/articles/14000113323>

3.1.1 Enable the Custom Tab

To enable the custom tab for the Applications module:

- Switch to the **Admin** view (1) and select **Applications** (2) from the vertical menu on the left.
- Select the **Tab Headers** tab (3) to open the list of tabs available to the module.
- Rename **Custom Tab 1** to **RemoteApp** (4) and ensure that **Is Visible** (5) is enabled.
- Click **Save** (6) at the top of the screen to save the changes.

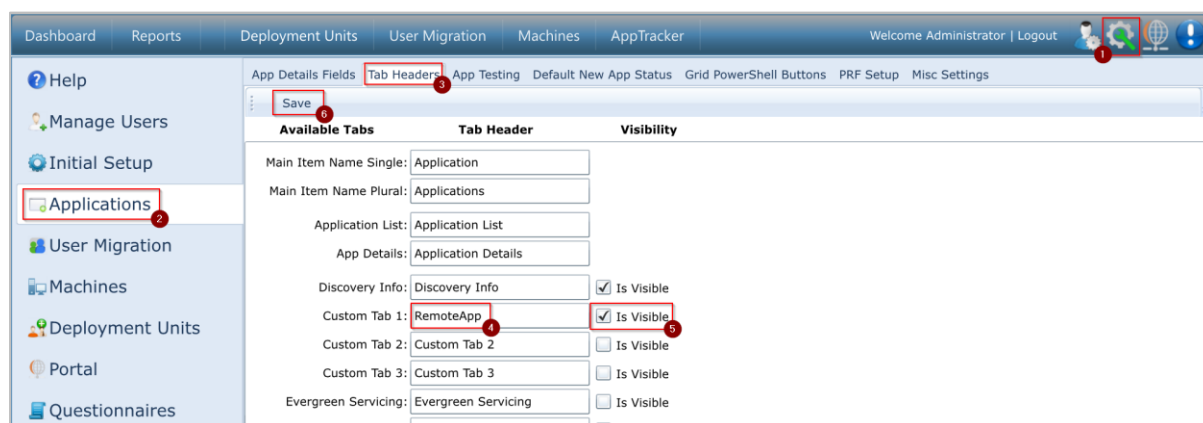


Figure 17 - Enable the Custom Tab for RemoteApp

3.1.2 Populate the RemoteApp Custom Tab

After the new tab has been created, it is ready to be populated with fields to capture the RemoteApp details:

- While still in the **Admin** view (1), select **Questionnaires** (2) from the vertical menu on the left.
- Expand the **Questionnaire** dropdown and choose **App Custom Tab 1** (3).
- Rename **Display Name** to **RemoteApp** (4) and enable **Display History in Tabs** (5).
- Click **Create Sub-Tab** (6) to create the first set of questions.

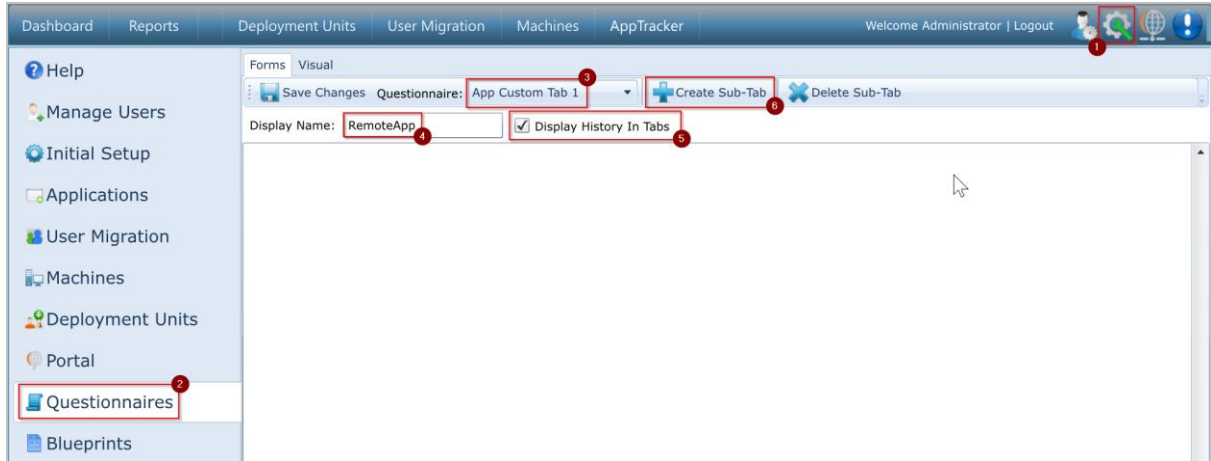


Figure 18 - Populating the RemoteApp Custom Tab

- Type the title for this section, for example **Publishing Details** (1), when prompted to enter a **Sub-Tab Title** and click the **Create Sub-Tab** (2) button.

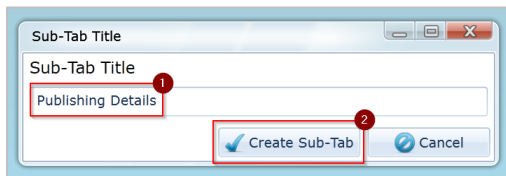


Figure 19 - Naming the Sub-Tab

- This will create a new sub-tab that should be populated with the appropriate fields for the project (1).
- Click the **Save Changes** button (2) towards the top of the screen.

(Image overleaf.)

Forms | Visual

Save Changes Questionnaire: App Custom Tab 1 Create Sub-Tab Delete Sub-Tab

Display Name: RemoteApp Display History In Tabs

Publishing Details

Sub-Tab Id: 62 Sub-Tab Header: Publishing Details Display Order: 0 Rebuild Display Order Is Visible

Display As	Question Text	Options	Tool Tip	Order	VIS	RO	HST	QId
Click here to add new item								
Header	Hosting			0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1108
Text Line	Tenant Name			1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1109
Text Line	Host Pool Name			2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1110
Text Line	App Group Name			3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1111
Spacer	-			9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1112
Header	App Details			10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1113
Text Line	Internal Name		E.g. internetExplorerContosoWebApp	11	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1114
Text Line	File Path		E.g. c:\Program Files\Internet Explorer\iexpl	12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1115
Text Line	Friendly Name		Corporate Web App	13	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1116
Text Line	Icon Path		C:\Program Files\Internet Explorer\iexplore.	14	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1117

Figure 20 - Adding RemoteApp Configuration Details

An example of the finished RemoteApp page can be found in 4.3 - Appendix C: Example of The RemoteApp Tab.

4 Appendices

4.1 Appendix A: Examples of The User-Specific Virtualisation Tab

Settings

Sub-Tab Id: 57 Sub-Tab Header: Settings

Display Order: 0

Rebuild Display Order

Is Visible

Display As	Question Text	Options	Tool Tip	Order	VIS	RO	HST	QId
Click here to add new item								
> Header	Active Directory - Future State			10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1049
Dropdown	User identity/password hash synchronised to Azure	Outstanding Scheduled Complete		11	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1030
Text Line	Domain Name			12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1031
Dropdown	Domain Type	Azure AD On-premise Hybrid		13	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1033
Spacer	-			14	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1038
Header	M365 Licensing			20	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1080
Dropdown	License Type	Microsoft 365 F1 Microsoft 365 E3 Microsoft		21	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1081
Spacer	-			29	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1079
Header	VDI Preferences			30	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1048
Checkbox(s)	Remote Desktop Client	Windows Desktop Web Client macOS iOS A		31	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1043
Checkbox(s)	Hardware Type	Existing PC - Upgrade Existing PC - Wipe &		32	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1044
Spacer	-			39	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1051
Header	User Profile			40	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1052
Info	Existing Profile			41	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1037
Text Line	Profile Location		For example, \\fileshe	42	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1035
Dropdown	Profile Type	Local User Profile Disks Roaming User Profil		43	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1036
Spacer	-			44	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1050
Info	Target Profile			45	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1039
Text Line	Target Storage Location			46	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1040
Dropdown	Target Type	Microsoft FSLogix Microsoft OneDrive Liquic		47	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1041
Spacer	-			48	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1083
Info	Profile Migration			49	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1082
Dropdown	Current Status	1. Profile Identified 2. Storage - Target Iden		50	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1047
Date/Time Picker	Profile Migration Date/Time			51	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1078

Figure 21 - Example settings for the user-specific Virtualisation tab

Russell Robertson (10001/Global)

Full User List Migration Details (2) User Data Survey AD Info Virtualisation Evergreen Servicing Defects (0) Application (20) Machines (1) Attachments (0) History

Save Details Reload Data Hide Tabs

Settings

Active Directory - Future State

User identity/password hash synchronised to Azure: Scheduled

Domain Name: JimmyJamesAnd.Co

Domain Type: Hybrid

M365 Licensing

License Type: Microsoft 365 E5

VDI Preferences

Remote Desktop Client: ☒ Windows Desktop ☐ Web Client ☐ macOS ☒ iOS ☐ Android

Hardware Type: ☐ Existing PC - Upgrade ☒ Existing PC - Wipe & Reload ☐ Thin-client Device ☒ Tablet ☐ Mobile

User Profile

Existing Profile

Profile Location: \\bush\users\rrobertson\$?

Profile Type: Roaming User Profile

Target Profile

Target Storage Location: \\outback\profiles\rrobertson\$

Target Type: Microsoft FSLogix

Profile Migration

Current Status: 3. Migration - Scheduled

Profile Migration Date/Time: 18/06/2021 19:00

Figure 22 - An example of a MigrationStudio user's view of the user-specific Virtualisation tab

4.2 Appendix B: Examples of The Machine-Specific Virtualisation Tab

Display Name: ☐ Display History In Tabs

Settings

Sub-Tab Id: **64** Sub-Tab Header: Display Order: [Rebuild Display Order](#) ☒ Is Visible

	Display As	Question Text	Options	Tool Tip	Order	VIS	RO	HST	QId
	Click here to add new item								
>	Header	Target Virtual Machine Configuration			10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1140
	Dropdown	Migrate or Create VM?	Migrate Existing VM Crea		11	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1141
	Dropdown	VM OS	Windows 10 Enterprise M		12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1142
	Text Line	VM Image Name			13	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1143
	Dropdown	Usage Profile	Light Medium Heavy Cus		14	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1144
	Text Line	If Custom, please provide further details			15	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1145
	Dropdown	Disk Type	Standard HDD Standard		16	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1146
	Radio Buttons	GPU support required?	Yes No		17	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1147
	Spacer	-			19	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1148
	Header	VM Provisiong (ESM-only)			20	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1149
	Text Line	AD Domain Join UPN			21	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1150
	Text Line	Build/Admin Password		Admin pass	22	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1151
	Text Line	OU		For example	23	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1152
	Text Line	Resource Group			24	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1153
	Text Line	Virtual Network			25	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1154
	Text Line	vmSubnet			26	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1155
	Spacer	-			29	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1156
	Header	Host Pool			30	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1157
	Text Line	Host Pool Name			31	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1158
	Dropdown	Host Pool Type	Pooled Personal		32	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1159
	Dropdown	Target Environment	Dev Validation Production		33	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1160

Figure 23 - Example settings for the machine-specific Virtualisation tab

Dashboard Reports Deployment Units User Migration Machines AppTracker Welcome Administrator | Logout

PC00001

Full Machine List Machine Details (0) Additional Info. Evergreen Servicing User Migrations (1) Application Defects (0) Attachments (0) Virtualisation History

Save Details Reload Data Hide Tabs

Settings

Target Virtual Machine Configuration

Migrate or Create VM?: Create New VM

VM OS: Windows 10 Enterprise Multi-Session

VM Image Name: WVD-MS-ENT-20200328-v1

Usage Profile: Heavy

If Custom, please provide further details:

Disk Type: Premium SSD

GPU support required?: ☒ Yes ☐ No

VM Provisioning (ESM-only)

AD Domain Join UPN: wvdProvisioning@JimmyJamesAnd.Co

Build/Admin Password:

OU: OU=WVD,OU=Windows10,OU=Computers,DC=JimmyJamesAnd,DC=Co

Resource Group: W10Production

Virtual Network: RG_WVD_EURUK1-vnet

vmSubnet: default (10.0.0.0/24)

Host Pool

Host Pool Name: w10.wvd-provision-host-pool202003291052

Host Pool Type: Personal

Target Environment: Production

Figure 24 - An example of a MigrationStudio user's view of the machine-specific Virtualisation tab

4.3 Appendix C: Example of The RemoteApp Tab

Dashboard Reports Deployment Units User Migration Machines AppTracker Welcome Administrator | Logout

#1689 Mozilla Firefox v12.0 [1. Identified]

Application List Application Details (0) Discovery Info RemoteApp Testing (1) Defects (0) Contacts (1) Dependencies (0) IT Ninja Tips (0) QA Checks (0) Attachments (0) Request

Save Reload Hide Tabs

Publishing Details

Hosting

Tenant Name: jimmyjamesandco.onmicrosoft.com

Host Pool Name: appProd

App Group Name: Default Application Group

App Details

Internal Name: firefox12

File Path: C:\Program Files\Mozilla Firefox\firefox.exe

Friendly Name: Mozilla Firefox

Icon Path: C:\Program Files\Mozilla Firefox\firefox.exe

Figure 25 - An example of a MigrationStudio user's view of the RemoteApp tab