Glossary

Summary

A glossary of Tachyon terminology.

1E Client | Action | Agent | Audit information log | Historic Data Capture | Agent Language | Agent Provider | Auto-curation | Background Channel | Client module | Column filters | Column Picker | Column sorts | Configuration Manager Extensions | Consumer | Consumer API | Consumer requests | Coordinator Service | | Coordinator Instrumentation module | Coordinator Workflow module | Core | Core Internal | Custom Role | Custom Properties | Device tags | DNS Name | Event Subscription | Explorer application | Filters | Freeform tags | FQDN | Global Actioners | Global Administrators | Global Approvers | Global Questioners | Global Viewers | Guaranteed State application | Infrastructure Administrators | Instruction | Instruction Definitions | Instruction Definition Files | Instruction Sets | Instruction Set Administrators | Instrumentation data | JSON Provider | Legacy OS | License file | License Service | Management Group Administrators | Method | Normalization | Patch Success application | Permissions | Permissions Administrators | Persistent Storage | PowerShell Provider | Product Pack | Product Pack Administrators | Product Pack deployment tool | Providers | Question | Report Refresh | Response | Role-Based Access Control | SCALE | SDK | Securable | Server installation account | Settings application | Single-Switch installation | Single-server installation | SMTP gateway | Switch | Switch Host | System Principal | System Role | Tachyon Activity Record | Tachyon client | Tachyon content | Tachyon Exchange | Tachyon Instruction Management Studio | Tachyon Instruction Runner | Tachyon Master database | Tachyon Master Stack | Tachyon Portal | Tachyon Product Pack Editor | Tachyon Responses database | Tachyon Response Stacks | Tachyon Role | Tachyon Run Instruction utility | Tachyon Server | Tachyon Stack | Tachyon System | Tachyon Toolkit | Tachyon User | Tags | Two-factor authentication | Website | Workflow commands

Tachyon alphabetical glossary

Term	Definition
1E Client	1E Client provides client features and modules for 1E products including Tachyon. It replaces the Tachyon Agent.
Action	In Tachyon an Action is a specific type of instruction that is sent to Tachyon client devices which can be used to modify the state of the target device. For example, setting a registry key, killing a process, deleting a file. Whereas a Question is an instruction that requests information from the target device, but does not change its state. Generally an Action needs to undergo an approval process before it is sent.
Agent	Agent is the old name for the Tachyon client. The Tachyon Agent has been replaced by the 1E Client which provides client features and modules for 1E products including Tachyon.
Audit information log	The Audit information log page displays audit information related to installation, permissions, instruction set and consumer related operations carried out using the Explorer and Settings applications. See Audit information log page
Historic Data Capture	The old name for Tachyon Activity Record.
Agent Language	The Agent language is an interpretive programming language that is executed by the Tachyon client in the form of an **instruction payload**. Instructions, and their payload, are based on instruction definitions which are stored in the Tachyon Master database. Definitions are uploaded into the database from the Tachyon Administrator console by dragging and dropping one or more Instruction Definition files, a Product Pack or ZIP file containing Instruction Definition files. The language uses Agent modules and methods. The language is documented in the SDK and is called SCALE.
Agent Provider	A plug-in component for the 1E Client which communicates with an external component, such as an operating system facility (for example Windows registry) or a service-provider application (for example 1E Nomad). 1E Client modules use Providers to get their work done. Examples: - WMI provider - Registry provider - Nomad provider - BASH provider
Auto-curation	Auto-curation is a Catalog function and refers to the automated process of creating match rules in 1E Catalog. These match rules are neither created by the customer not by the 1E curation team. The rules are created in the customer's local 1E Catalog copy using automated logic built by 1E.

Background Channel	The Background Channel is a mechanism by which the Tachyon client can download resources via HTTPS without loading the Switch. Since this traffic does not go through the Switch, the Tachyon client is still able to receive and process instructions instructions while performing these downloads. From v2.0 onwards, the Tachyon client is able to download resources via 1E Nomad.

The Background Channel is a web application on the Tachyon Server Website and provides the following:

- Stores Tachyon content from the Consumer API in the Background Channel for Tachyon clients to retrieve
- Responds to Tachyon clients retrieving Tachyon content from the Background Channel

See Tachyon Architecture and Communication Ports. |
| Client module | A plug-in component for the 1E Client which encapsulates business logic.

Modules contain Methods, which can be invoked by SCALE.

Modules (and their methods) effectively provide a platform independent API. To that end, Modules and their Methods do not (generally) talk about anything platform specific (Windows, Linux, Android etc).

Examples:

- FileSystem
- OperatingSystem
- Network
- Software |
| Column filters | Some tables contain a column filter that lets you easily filter the information displayed in the table.

Using column filters

The picture opposite shows an example taken from AppClarity. In our example we want to filter the table to show only those items where the **Edition** contains the text **Prof**.

 |

To filter the table on the **Edition** column:

1. Click on the filter icon ▼ just beneath the header row in the **Edition** column.

		Version	Edition
↕ ▼		↕ ▼	↕ ▼
		2016	Professional Plus
		16.*	ProPlus
		2015	Ultimate
		2017	Enterprise
		2017	Professional

2. The filter popup is displayed.

		Version	Edition
↕ ▼		↕ ▼	↕ ▼

Select... ▼

Apply

| | | 2017 | Professional |

3. Now select the operator. In our example this will be **contains**.

	Version	Edition

Select...

- is
- is not
- **contains**
- in
- does not contain
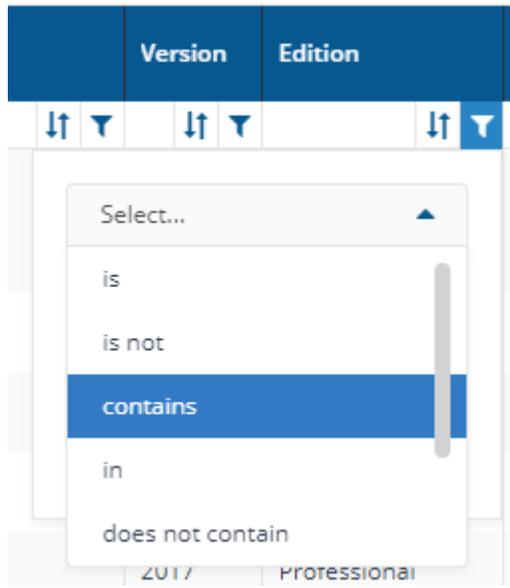
2017   Professional

4. Then type the text **Prof** into the text field.

	Version	Edition

contains ▾

Prof

Apply
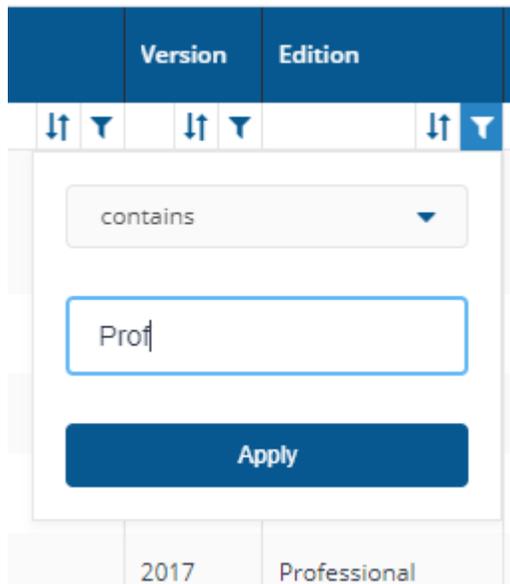
2017   Professional

5. Click **Apply** and a new filter will be added to the table.

Edition contains Prof ✕

6. The table will be filtered to just those items whose **Edition** contains the text **Prof**.

	Version	Edition
↓↑ ▼	↓↑ ▼	↓↑ ▼
	2016	Professional Plus
	2017	Professional
	2016	Professional Plus
	2016	Professional

Adding another filter

You can add another filter by clicking on the filter icon ▼ for any of the columns. The picture opposite shows another filter added selecting table rows where the **Type** also contains the text **License**. The table will also be filtered accordingly.

Edition contains Prof ✕   AND   Type contains License ✕

Removing filters

You can remove filters by clicking on the filter close icon ✕ at the end of the filter.

| Column Picker | **Using column picker** |

Where the column picker control is shown you can choose which columns are displayed. In the following example on the **Microsoft Core License Demand** page we hide the **Unknown Installs** column and move the **License Demand** column to the left of the page.

| Global ▼ | Default Compliance ▼ |

≡ ↔ ⤢ ⊞

License Demand	Unknown Installs
↕ ▼	↕ ▼
2748	51
2337	1
0	10
0	307
1338	1
0	96
4176	111
444672	907
0	1

Show Detailed Report

To pick the displayed columns:

1. Click on the Choose columns icon to the right of the header row to view the visable columns.

Visible columns

≡ ☐ 1	Licensed Software	•••
≡ ☐ 2	Installs	•••
≡ ☐ 3	License Demand	•••
≡ ☐ 4	Unknown Installs	•••

⏩

⏪

2. To exclude **Unknown Installs**, select the Unknown Installs row and click **Exclude columns** button.

Visible columns

≡ ☐ ① Licensed Software ⋯

≡ ☐ ② Installs ⋯

≡ ③ License Demand ⋯

⏩

⏪ ≡ ☑ ④ Unknown Installs ⋯
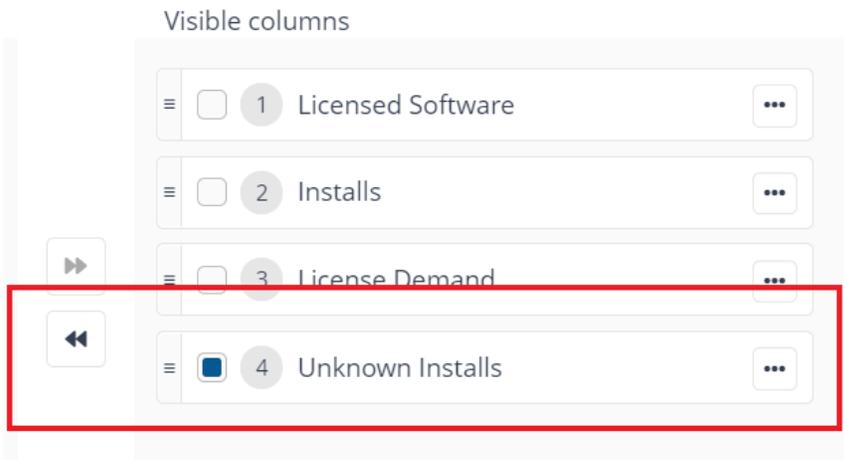
2. The **Unknown Installs** colu mn is now hidden.

Choose columns Add/Remove columns from right side

Hidden columns

≡ ☐ Unknown Installs ⏩

Visible columns

≡ ☐ ① Licensed Software ⋯

≡ ☐ ② Installs ⋯

⏩ ≡ ☐ ③ License Demand ⋯

⏪
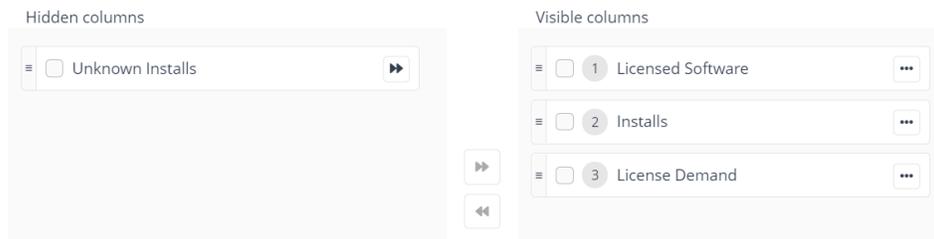
3. To move the **License Demand** column to the top of the list, hover your mouse over **License Demand** and using the direction control drag it to the top of the list.

Hidden columns

≡ ☐ Unknown Installs ⏩

Visible columns

≡ ☐ ① License Demand ⋯

≡ ☐ ② Licensed Software ⋯

⏩ ≡ ☐ ③ Installs ⋯

⏪
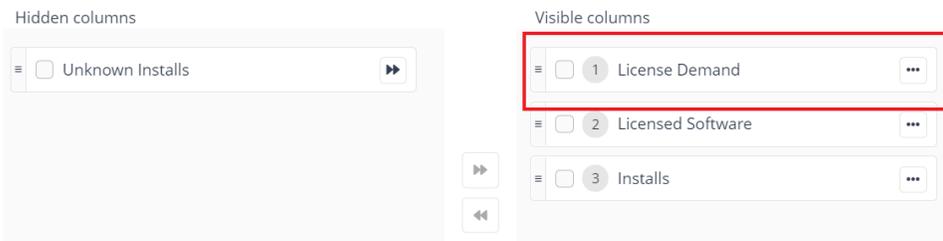
4. The Microsoft Core License Demand page has now been automatically updated with our changes.

License Demand	Licensed Software	Installs
2748	Windows Server DataCenter	647
2337	SQL Server Enterprise	649
0	SQL Server Analysis Services	0
0	SQL Server Integration Services	0
1338	SQL Server Standard	300
0	SQL Server Reporting Services	0
4176	Windows Server Enterprise	265
444672	Windows Server Standard	4019
0	SQL Server Data Quality Services	0

Column sorts

Some tables contain column sorts that let you easily re-order the information displayed in the table.

Using column sorts

The picture opposite shows an example taken from AppClarity. In our example we want to sort the table on the **Cost** column from the highest cost at the top to the lowest at the bottom.To sort the table on the **Cost** column:

1. Click on the sort icon ⇅ just beneath the header row in the **Cost** column.

Quantity	Cost
26000	$8,060,000.00
30	$11,970.00
10	$8,990.00
182	$454,818.00

2. The sort popup is displayed.

Quantity	Cost
260	
30	
10	$8,990.00
182	$454,818.00

↑ Sort ascending
↓ Sort descending
✖ Clear sorting

3. Now select the sort direction. In our example this will be **Sort descending**.

Quantity	Cost
260	
30	
10	$8,990.00
182	$454,818.00

↑ Sort ascending
↓ **Sort descending**
✖ Clear sorting

4. After selecting this the data in the table is now sorted on the **Co st** column from highest to lowest and the sort icon has changed

   to a sort descending icon .

Clearing the sort

You can clear the sort by clicking on the sort icon again and selecting the **Clear sorting** menu item from the sorting popup.

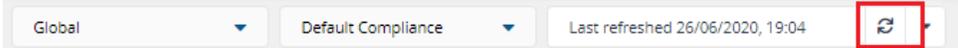|	
Confi gurati on Mana ger Exten sions	The Configuration Manager Extensions currently include. • Configuration Manager Agent emergency stop and resume actions • Configuration Manager Agent actionse • Client Health Check • Tachyon Run Instruction utility (used by the each of the above right-click actions to request Tachyon to run an instruction) • Tachyon Instruction Runner (a mini UI version of the Tachyon Explorer) This feature is included in the Tachyon Toolkit. Documentation for installing and using the Configuration Manager Extensions will be available soon.
Cons umer	A Tachyon Consumer is any application that connects to and uses the Consumer API. An example is the Explorer application.
Cons umer API	The Consumer API is a documented set of API endpoints provided by a web application on the Tachyon Web Server called Consumer. It is referred to as the Consumer API in order to avoid confusion with Tachyon Consumers, which are 'consumers' of the API. The Consumer API is a web application on the Tachyon Server Website, actually named Consumer, and provides the following: • Processes the consumer requests from the Explorer and other Consumers • Publishes Tachyon content to the Tachyon Background Channel • Forwards requests for instrumentation data from the Explorer to the Tachyon Instrumentation component • Forwards workflow commands from the Explorer to the Tachyon Workflow component See Tachyon Architecture and Communication Ports.
Cons umer reque sts	A Tachyon Consumer sends requests to the Consumer API.
Coord inator Service	The Coordinator Service has two modules: • Instrumentation module • Workflow module See Tachyon Architecture and Communication Ports.

Coordinator Instrumentation module	The Coordinator Instrumentation module is part of the Coordinator Service on the Tachyon Server which processes instrumentation data from the following components: • Core • Coordinator Workflow module • Switch And responds to requests for instrumentation data from the Consumer API. See Tachyon Architecture and Communication Ports.
Coordinator Workflow module	The Coordinator Workflow module is part of the Coordinator Service on the Tachyon Server that provides the following: • Forwards workflow commands from the Consumer API to the Core • Stores workflow in SQL • Connects to remote SMTP to send emails used in the approval process for actions See Tachyon Architecture and Communication Ports.
Core	The Core is a Tachyon Server web component that does the following: • Forwards workflow commands from the Coordinator workflow module to the Tachyon Switch • Forwards responses from the Switch to the Responses database (this task requires high throughput) • Generates and sends instrumentation data to the Instrumentation service See Tachyon Architecture and Communication Ports.
Core Internal	Core Internal is the part of the Core which allows fast internal communication with the Switch using HTTP instead of HTTPS, restricted to the Switch server's local IP Address only. See Tachyon Architecture and Communication Ports.
Custom Role	Tachyon roles that define which Tachyon Users have access to which Instruction Set. These roles can be modified in the Administration pages by users assigned to the Security Administrators role.
Custom Properties	Custom Properties Administrators can manage the custom properties using the Properties page in the Tachyon Explorer. The only custom property type available after installing the Tachyon server is Coverage tags, further types may be added during installation of other Tachyon Consumers.
Device tags	Device tags can be used when setting the coverage for a particular question so that only Tachyon client devices with a particular tag name and value get the question. The names and values of Device tags must be pre-configured by Tachyon Custom Properties Administrators before setting them on a Tachyon client device using Device tag actions. Device tags can also be queried directly by Device tag questions. In 1E Client log files, Device tags are also referenced as scopable tags.

DNS Name	DNS Name FQDN is the term used in this documentation to represent the name of a Tachyon Server. Typically a Tachyon Server will have only one DNS Name, which will be the
	
	CNAME or an (A) Host record that uniquely represents a server's IP Address. 1E normally recommends using an CNAME record.
	
	In a Tachyon system, each Tachyon Server will have a DNS Name FQDN.
	
	In a single-Switch installation the Switch is on the same server and uses the same DNS Name. When a Response Stack has more than one Switch, each Switch has its own IP Address, so you can choose if the will share the same DNS Name, or if each will have its own DNS Name. The Tachyon Server certificate must have all
	
	<pre>NAME TYPE VALUE
	--- 	
	tachyon.acme.com. CNAME tachyon.acme.local.
	tachyon.acme.local. CNAME foo.example.com.
	foo.example.com. A 192.0.2.23</pre>
	
	tachyon.acme.com is an Alias record
	
	tachyon.acme.local is a CNAME record
	
	foo.example.com is a (A) Host record

Event Subscription	A type of instruction that can be sent to the Tachyon client. An Event Subscription tells the Tachyon client to monitor an arbitrary event source for a period of time (defined by the Instruction's TTL), to capture events as they occur and to report them back via the Switch.

Explorer application	The Explorer application is the web portal used by Tachyon users and administrators. It is an example of a Tachyon Consumer application. 　　MultiExcerpt named '**DirectURL**' was not found The page: **Using consumer applications** was found, but the multiexcerpt named '**DirectURL**' was not found. Please check/update the page name used in the 'multiexcerpt-include macro. It is a web application on the Tachyon Server Website and provides the following: - Browser connection providing the Tachyon Explorer and Administration pages - Sends consumer requests to the Consumer API See Tachyon Architecture and Communication Ports.
Filters	There are two kinds of filter: Question filters are used to reduce the responses from the Tachyon clients; View filters reduce the information displayed in the Tachyon Explorer on the Responses page.
Freeform tags	Freeform tags may be used to set properties on Tachyon client devices that can subsequently be used in Freeform tag questions. They cannot be used when defining the coverage for a question. Freeform tags can be set with arbitrary names and values that are defined only when running a Freeform tag action. In Tachyon log files, freeform tags are also known a non-scopable tags.
FQDN	Fully Qualified Domain Name. This is the complete domain name for a specific IP-connected device, and is unique within the network and unambiguous. The FQDN consists of two parts: the hostname and the domain name. For example tachyon.acme.com.
Global Actioners	This is a Tachyon system role which allows assigned users to ask questions, view responses and send actions for all instruction sets; use custom properties.
Global Administrators	This is a Tachyon system role which has the combined rights of all the other system roles.
Global Approvers	This is a Tachyon system role which allows assigned users to approve actions for all instruction sets. Users can approve unless the action was requested by themsleves.
Global Questioners	This is a Tachyon system role which allows assigned users to ask questions and view responses for all instruction sets; use custom properties.
Global Viewers	This is a Tachyon system role which allows assigned users to view instructions and responses for all instruction sets.
Guaranteed State application	Guaranteed State application is used to ensure endpoint compliance to enterprise IT policies. It is an example of a Tachyon Consumer application. ⓘ　Guaranteed State can be reached directly using the following URL: ``` https://<tachyon DNS Name FQDN>/Tachyon/App/#/guaranteedstate/ ``` where <tachyon DNS Name FQDN> is the one set up during the preparation phase, as described under the heading Preparation: DNS Names.
Infrastructure Administrators	This is a Tachyon system role which allows assigned users to view instrumentation on the system status dashboard.

Instruction	Instruction is the generic term used to describe:
	• Questions
	• Actions
	An Instruction is sent to one or more Tachyon clients, and will yield one or more responses.
Instruction Definitions	Instruction Definitions are retrieved from the Tachyon Core by the Switch. They define the type and functionality of the instructions and are used to control the Tachyon clients to respond in the appropriate way.
Instruction Definition Files	Instruction Definition files are XML format files that contain definitions for Instructions and any associated resources.
Instruction Sets	Instruction Sets, new to Tachyon version 3.1, provide a way of organizing instructions and setting permissions on those instructions. They can be created, modified and deleted from the Tachyon Administration console. Instruction Sets are a replacement for the Product Packs of earlier versions, whose contents could only be determined outside of Tachyon.
Instruction Set Administrators	This is a Tachyon system role (introduced in version 3.1) which allows assigned users to create, modify and delete Instruction Sets in the Tachyon Administration console.
	They are able to import Instructions by dragging and dropping one or more Instruction Definition files, a Product Pack or ZIP file containing Instruction Definition files.
	They can then organize imported Instructions into the Instruction Sets.
Instrumentation data	Each of the Tachyon components creates instrumentation data that can be used to display how the Tachyon system is performing.
JSON Provider	This is an internal provider within the Tachyon agent library, used to deserialize and return a JSON string as a data table. Analogous to the Windows specific PowerShell Provider.
Legacy OS	In this documentation, Windows XP, Vista and Windows Server 2003 are referred to as legacy OS.
	Microsoft has withdrawn support for Windows XP and Windows Server 2003, but 1E includes Vista in this list because it is not significantly used by business organizations.
	For details of limitations and additional considerations for these OS, please see Constraints of Legacy OS.
License file	1E will provide you with a **Tachyon.lic** license file that defines the products and features your Tachyon System is able to use, for how long, and how many devices it supports, this may be an evaluation or subscription license.
	• The license must be activated. Once activated, it may be used only by the Tachyon System that activated it.
	• Licenses can be renewed or updated, but if allowed to expire, then the affected products or features will not be usable.
	• For a new installation, the Tachyon Setup program will let you select the license file from any folder on disk.
	• For an existing installation, the license file is copied into the folder: %PROGRAMDATA%\1E\Licensing on your Tachyon Server.
	For details of what the license file needs to contain, please refer to Design Considerations: License requirements for consumer applications.
	Ensure the following URL is whitelisted:
	• https://license.1e.com
	This URL must be accessible from the Tachyon Server during setup and running of Tachyon.
	The Tachyon license must be validated on a regular basis via internet contact with the 1E license service. The regular validation period is set when the license is requested.
	For whitelisting purposes, the Tachyon Server (specifically the Coordinator Workflow module in the Master Stack) requires an Internet connection to the 1E license service, as defined in the license file itself. If activation fails, then the system will install but not be usable until activation is completed.
License Service	The License Service is hosted in the cloud by 1E, and accessible via an internet connection.

Management Group Administrators	This is a Tachyon system role (introduced in version 3.3) which allows assigned users to create, modify and delete Management groups and modify their membership. In version 3.3 this is done using Scripts via the Consumer API.
Method	Methods are documented in the SDK.
Normalization	Normalization is a Platform function that refers to the process of finding (or not finding) a match rule in 1E Catalog, then deduplicating and rationalizing the information using Platform logic, and publishing the information on the 1E Catalog UI. Partial Matching for example does not have a match rule in 1E Catalog but it's still normalized and published on the UI using Platform logic.
Patch Success application	Patch Success application is used to report on and ensure successful patching of your enterprise. ⓘ Patch Success can be reached directly using the following URL: `https://<tachyon DNS Name FQDN>/Tachyon/App/#/patchsuccess/` where <tachyon DNS Name FQDN> is the one set up during the preparation phase, as described under the heading Tachyon 8.0 - Preparation: DNS Names.
Permissions	How the Role-Based Access Control feature assigns Tachyon Users to Tachyon Roles, providing access to Instruction Sets and Administration pages.
Permissions Administrators	This is a Tachyon system role which allows assigned users to: • Add or remove users • View system roles • View, add, modify and delete custom roles • Assign roles to any Instruction Sets and define their permissions • View the Audit information log This role was previously called Security Administrators.
Persistent Storage	The Tachyon client stores information in Persistent Storage which it needs each time it starts. For example the last processed instruction. A hash value of each item of information is stored in the registry, which the Tachyon client uses to ensure it trusts each item. Persistent storage includes a local database that is compressed and encrypted in a way that ensures a very low impact on device performance and security. This database is used to store data for the Tachyon Activity Record feature.
PowerShell Provider	This is a Windows specific internal provider within the Tachyon agent library. It provides functionality to execute powershell.exe from a fixed location (System32\WindowsPowerShell\v1.0) on a Powershell (.sp1) script and return the result. Some earlier versions of Windows (such as Windows XP) do not support PowerShell.

Product Pack	Product Packs contain instructions or other things which extend the capabilities of Tachyon. Product Packs which are required to support Tachyon features out-of-the-box are provided in the Tachyon Platform zip downloaded from the 1E Support Portal. Other Product Packs are avalibale for download from Tachyon Exchange. There are two types of Product Packs described in the following table. <table><tr><td>**Classic Product Packs**</td><td>Classic Product Packs contain instructions (actually Instruction Definition files) for use in Explorer and other Tachyon applications. Classic Product Packs can be uploaded into Tachyon using either of the following methods: - Product Pack deployment tool - which will upload the instructions in the pack and create an Instruction Set for them based on the name of the zip (with hyphens converted into spaces) - the Tachyon Portal Settings app Instructions Instruction Sets, described in Instructions Menu. This method requires instructions to be organized into Instruction Sets by an Instruction Set Administrator. Settings can also be used to export instructions. Either method requires an Instruction Set Administrator to configure permissions for accessing the instructions.</td></tr><tr><td>**Integrated Product Packs**</td><td>Introduced in Tachyon 4.1, Integrated Product Packs contain policies, rules and fragments for use by Guaranteed State, and may also include instructions. If the Integrated Product Pack contains instructions associated with the policies, the tool creates an Instruction Set using the name in its manifest file. Integrated Product Packs are uploaded using the Product Pack deployment tool.</td></tr></table>
Product Pack Administrators	A Tachyon system role for Instruction Set Administrators that allows assigned users to add, update and delete Instruction Sets.
Product Pack deployment tool	A tool introduced in Tachyon 4.1 for uploading Classic and INtegrated Product Packs. Please see Tachyon Product Pack deployment tool.
Providers	Providers can be used by applications to leverage external tools to perform specific operations. For example the reclaim provider enables software to be uninstalled, thereby extending the functionality of the platform to include uninstallation.
Question	In Tachyon a Question is a specific type of instruction that requests information from Tachyon client devices. The information is returned to Tachyon as responses.
Report Refresh	You can refresh reports from individual AppClarity screens as well as using the Settings App. Where this is available you can do this by using the refresh icon next to the **Last Refreshed** box:
Response	The data resulting from an Tachyon client executing an instruction.
Role-Based Access Control	Also known as RBAC. This is a general term for assigning users to Tachyon roles which allow them access specific features of Tachyon. Roles can be assigned to AD users and groups added in the Administration Security page. A Tachyon role can be either of the following: - System role - Custom role
SCALE	The Agent Language: Simple Cross-platform Agent Language for Extensibility.

SDK	The Tachyon SDK describes the following and is available here: TCNSDK - Agent Language (SCALE) - Agent modules and methods
Secur able	Refers to an item that may be secured by Tachyon using RBAC.

Serve r install ation accou nt	This is the account used to run Tachyon Setup (and the MSI installer) when installing or upgrading a Tachyon Server. The account is automatically defined as a Tachyon admin user with limited rights which cannot be edited (called a system principal). The installation account only has sufficient rights to add other Tachyon users, assign them to Tachyon roles, and install Tachyon applications. The users and roles created by the installation account are then used for ongoing use and management of Tachyon.
	
	If you need the installation account to have additional Tachyon roles or be a Full Administrator, then the recommended approach is:
	
	- First create a role-based AD Security group, and add the installation and other accounts to this group
	- Then, the installation account:
	    - Logs into Tachyon and navigates to Settings Permissions Users and Groups
	    - Creates a new Tachyon user for the role-based AD Security Group
	    - Assigns the relevant system role(s) to the new Tachyon user - this can be Full Administrator.
	
	When installing a Tachyon Server, the account must be an Active Directory domain account with various rights on the Tachyon Server and the SQL Server instance. For more detail see Server Installation Account.
	
	For a new installation, only the Server installation account is able to use the Tachyon Explorer and assign user rights to other users and groups. Once these other users or groups have been assigned, then the Server installation account can be optionally disabled in AD pending future updates and upgrades.
	
	The Server installation account is a system principal and cannot be deleted or granted additional rights; it is able to manage additional users and groups, create and edit custom roles, which are then used for ongoing use and management of the system. However, the account may be included in any AD security group assigned to a Tachyon system or custom role.

Settin gs applic ation	Settings application is used to configure Tachyon system and application settings. It is an example of a Tachyon Consumer application. Introduced in Tachyon 4.0 it combines the administration and monitoring menus for Tachyon and SLA Platform. ⓘ Settings can be reached directly using the following URL: ``` https://<tachyon DNS Name FQDN>/Tachyon/App/#/platform/ ``` where <tachyon DNS Name FQDN> is the one set up during the preparation phase, as described under the heading Preparatio n: DNS Names.
Single - Switc h install ation	A **single-Switch installation** is a type of single-server installation which has only one Switch. This is the simplest Tachyon Server configuration.
Single - server install ation	A **single-server installation** is where all Tachyon Server components are installed on the same Web Server, with one to five Switches, and SQL Server either local or remote. A single-Switch installation is the simplest configuration. More than one Switch requires additional hardware resources. If SQL Server is remote then it is also referred to as a **split-server configuration**. Best performance is achieved using a local SQL Server installation. See Tachyon Architecture and Communication Ports.
SMTP gatew ay	Systems such as the Tachyon Server connect to the gateway in order to send emails. Also known as SMTP relay.

Switch	The Switch component on the Tachyon Server provides the following: • Sends instructions to and retrieves responses from the Tachyon clients • Forwards responses to the Core component • Receives workflow commands from the Core component • Retrieves instruction definitions from the Core component • Sends instrumentation data to the Instrumentation component On the Tachyon Server, the Switch Host service is responsible for managing all the local Switches The Switch configuration is stored in the SwitchConfiguration table of the Tachyon Master database. This includes the number of slots and workers used by the Switch which controls the maximum number of devices that can be managed by each Switch. A Switch restart will fail if the Switch failed to de-register itself, therefore the registration entry in the Tachyon Master database will need to be manually removed after troubleshooting. See Tachyon Architecture and Communication Ports.
Switch Host	The Switch Host service • is a Windows service that manages local Switches • automatically starts each Switch and if a Switch stops, the Switch Host will analyse the reason and attempt to restart it • has a configuration file contains entries for one or more Switches • has its own log file See Tachyon Architecture and Communication Ports.
System Principal	A system principal is a Tachyon user which cannot be modified in the Administration pages, and is assigned to a system role. The Server installation account is a system principal which is assigned to the Consumer Administrator, Security Administrator and Instruction Set Administrator system roles.
System Role	Tachyon roles which cannot be modified in the Administration pages. Tachyon users can be assigned to these roles. The following are built-in system roles. • 1E Client Deployment Administrators • 1E Client Installer Administrators • Consumer Administrators • Custom Properties Administrators • Global Actioners • Global Administrators • Global Approvers • Global Questioners • Global Viewers • Infrastructure Administrators • Instruction Set Administrators • Management Group Administrators • Permissions Administrators
Tachyon Activity Record	This is a Tachyon client feature, also known as inventory, previously known as Historic Data Capture. This feature captures data from a number of sources on the client device, encrypts and stores in compressed form on the Tachyon client device. Raw and summarized (aggregated) data is stored and can be queried using instructions. See Tachyon client settings: Inventory module settings.
Tachyon client	Tachyon client features are provided by the 1E Client. The 1E Client is a replacement for the Tachyon Agent and includes client features and modeules for other 1E products including Tachyon. Tachyon enables rapid response to instructions using the Tachyon client, which supports the retrieval of information, running actions and device tagging. The Tachyon client can also be extended to support additional features. The client connects to the Switch and the Background Channel. See Tachyon Architecture and Communication Ports.
Tachyon content	Tachyon content is: • files (such as scripts) associated with a particular instruction via their Instruction Definition file, which the Tachyon client will download when it performs that instruction. • extensibles (normally in the form of DLLs on Windows), which the Tachyon client will download when it self-updates. This allows additional Tachyon client functionality to be deployed. Tachyon content is downloaded on demand via the Background Channel.

Tachyon Exchange	
Tachyon Instruction Management Studio	This feature is included in the Tachyon Toolkit. TIMS provides a user interface for developing and testing instructions using SCALE. It includes an isolated copy of the 1E Client so that you can develop instructions for that Tachyon client version, independent of the 1E Client version that may be installed on your computer. By default TIMS and its Tachyon client run under the security context of the user that started it. To use the context of **Local System**, as used by a normal Tachyon client, you can start TIMS using PSexec. More information about TIMS is available in the Tachyon Community on the 1E Support Portal. TIMS is now able to save Instruction Definition files.
Tachyon Instruction Runner	This feature is the graphical user interface part of the Configuration Manager Extensions which is included in the Tachyon Toolkit. It is a mini UI version of the Tachyon Explorer. It is an example of a Tachyon Consumer. It should not to be confused with the Tachyon Run Instruction utility available in the Tachyon Toolkit.
Tachyon Master database	The SQL Server database which contains: - Configuration details of the Tachyon System - Instruction definitions and Instruction Sets - Users (Principals) - Permissions - Roles - Devices - Audit log The configuration files for the following components contain SQL Connection strings for the Tachyon Master database. - Core - Coordinator Workflow module - Consumer API
Tachyon Master Stack	A Tachyon Master Stack is part of a Tachyon System. There is one Tachyon Master Stack that all the Tachyon Response Stacks communicate with. A Tachyon Master Stack contains the following components: - SQL Server instance with Tachyon Master Database (local or remote/split) - Consumer API - Coordinator - Explorer - Authentication - Registration
Tachyon Portal	The Tachyon Portal is the home page for Tachyon applications, which can be reached using the following URL: `https://<tachyon DNS Name FQDN>/Tachyon` where <tachyon DNS Name FQDN> is the one set up during the preparation phase, as described under the heading Preparation: DNS Names. The following buttons appear on all application pages of the Tachyon Portal. The refresh button is used to refresh the contents of the page. The expand button toggles the size of the page inside the browser by hiding or showing the menu and main title bar.

Tachyon Product Pack Editor	The Tachyon Product Pack Editor is no longer available in Tachyon 3.1 as Product Packs themselves are not used in the Tachyon Explorer. Instead Instruction Sets can be constructed using the Tachyon Administrator Console from imported instructions. One or more Instruction Definition files, a Product Pack or a zip file containing Instruction Definition files can be loaded into the Tachyon Administrator console by Instruction Set Administrators. The ability to save Instruction Definition files is now included in the Tachyon Instruction Management Studio.
Tachyon Responses database	The SQL Server database which contains: • Responses
Tachyon Response Stacks	A Tachyon Response Stack is part of a Tachyon System. This is where one or more Response Stacks talk back to a single Tachyon Master Stack. Multiple Response Stacks are necessary when additional Switches are required for scale, security or for geographic or other network reasons. Each Switch can handle 50000 devices, so each Tachyon Response Stack can handle a maximum of 250000 devices. Each Tachyon Response Stack has the following components: • Switch Host • Switches (up to 5, local or remote/split) • Core • SQL Server instance with Tachyon Responses database (local or remote/split) • Background Channel A Response Stack will typically host Switches and Background Channel using the same DNS Alias.
Tachyon Role	Tachyon roles are used to implement Role-base access control (RBAC) and assign permissions to Tachyon users and restrict access to areas of the Tachyon Explorer and ability to use instructions in Instruction Sets. The roles may be system roles or custom roles related to specific Instruction Sets.
Tachyon Run Instruction utility	This command-line utility is included in the Tachyon Toolkit and is targeted at 3rd party integration, and can be used by scripts. It is an example of a Tachyon Consumer. It is used by the Configuration Manager Extensions which is also available in the Tachyon Toolkit. More information about the Tachyon Run Instruction utility is available in the Tachyon Community on the 1E Support Portal.
Tachyon Server	A Tachyon Server is any server on which a Tachyon Server component is installed. The following are Tachyon Server components. • Coordinator service (Instrumentation and Workflow modules) • Switch Host • Switches • Website (including Explorer and Core) A Tachyon Server can have one or more Switches. See also single-server installation and single-Switch installation. See Tachyon Architecture and Communication Ports.
Tachyon Stack	There are two types of Stack: Master Stack and Response Stack. Every Tachyon system has a single **Master Stack**, which provides web services for Tachyon applications. Master Stack components are typically all installed on a single **Master Server**. Tachyon real-time features require **Response Stacks**, which are made up of one or more **Response Servers**. A **DMZ Server** is an example of a Response Server. Each Response Stack has at least one **Background Channel** for sharing resources, and a single **Core** component that supports an associated set of up to five **Switches**. Switches are the primary mechanism for rapidly requesting and retrieving responses from the **Tachyon clients**. As each Switch can handle up to 50,000 devices there is a limit of 250,000 devices per Response Stack. Higher numbers can be achieved if you contact 1E for guidance. Switches may be local or remote to the other components in the Response Stack. **Databases** for Tachyon, Catalog, Content Distribution, Experience, SLA and BI, are installed on SQL Server database instance(s) that may also be local or remote to their respective Master and Response servers. It is also possible for multiple Response Stacks to share the same Responses database. **Cubes** used by Experience and BI are installed on a local or remote SQL Server Analysis Services (SSAS) instance. For more details about architecture and components, please see Tachyon Architecture. Also see Design Considerations.

Tachyon System	At the top-most level, a Tachyon System consists of Tachyon Server components, grouped into Tachyon Stacks, and a set of Tachyon clients that are deployed onto the devices that you want to manage. In addition, a system can have one or more Consumers (the built-in Consumer is Explorer). See Tachyon Architecture and Communication Ports.
Tachyon Toolkit	The Tachyon Toolkit is a collection of the following tools, which can be installed on a Windows computer for use by a Tachyon User who has appropriate permissions. - Configuration Manager Extensions - this can be installed only on a computer that has already installed a supported version of Configuration Manager Console - Tachyon Instruction Management Studio - new feature to be added to the Toolkit soon - Tachyon Run Instruction utility The toolkit is available for download from the Tachyon Community in the 1E Support Portal. Documentation for installing and using the Toolkit will be available soon.
Tachyon User	A domain account that is authorized to access the Tachyon Explorer portal and/or the Tachyon Administration pages. Authorization is achieved by adding the AD account or group and assigning it to a Tachyon role.
Tags	There are two types of tag: coverage tags and freeform tags. In Tachyon log files, these tags are also known a scopable and non-scopable tags.
Two-factor authentication	Also known as 2FA. See Tachyon Explorer 8.0: Two-factor authentication.
Website	The Tachyon Website hosts the following web applications: Master: - Admin - Consumer - Consumer API - CoreExternal - Platform - Tachyon Response and DMZ: - Background - Background Channel - Core Optional applications on Master: - ContentDistrbution - Experience The Website has an HTTP binding and HTTPS binding. - The HTTP binding uses the server's hostname FQDN as a host header, and is used only by SLA components - please refer to Tachyon Server post-installation tasks: Removing the HTTP binding from the Tachyon website - One or more HTTPS bindings - these use the Tachyon Web Server certificate, the server's DNS Alias as the host name, and has SNI enabled. See Tachyon Architecture and Communication Ports.
Workflow commands	Workflow commands determine how the Coordinator Workflow module processes an instruction, particularly in terms of the permissions required to run the instruction.