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ClickView Access Manager – An Overview for I.T. Professionals

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CLICKVIEW PRODUCT MANAGER

OVERVIEW

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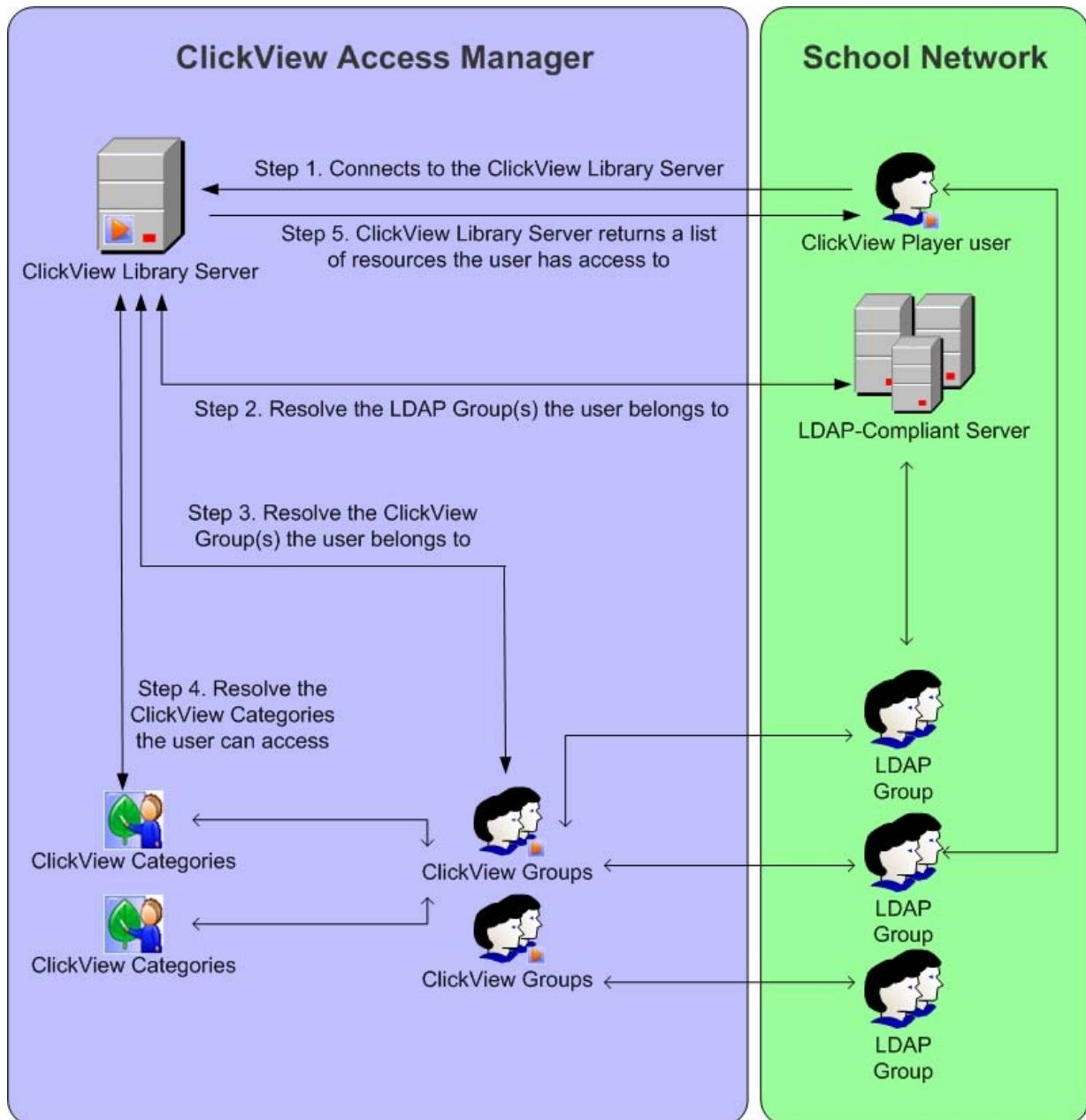
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INTRODUCTION TO THE CLICKVIEW ACCESS MANAGER

The ClickView Access Manager allows system administrators to restrict user access to the content on their ClickView Library Server by tapping into the schools existing network structure using LDAP.

A typical network uses a directory service to store and organise information about its users and network shares. This information is used by network administrators to manage user access.

LDAP (**L**ightweight **D**irectory **A**ccess **P**rotocol) is the protocol that allows cross-platform communication between the ClickView Access Manager and the directory service.



SYSTEM REQUIREMENTS

1. A network operating system such as Microsoft Windows 2000/2003 Server
2. ClickView Library Server 1.5 or above

The ClickView Access Manager has been primarily tested with Microsoft Windows 2003 (Active Directory). However, the ClickView Access Manager can be configured to be used in conjunction with any LDAP-compliant server.

The ClickView Access Manager is built into the ClickView Library Server 1.5 and needs to be activated with a licence key. You will **not** be required to upgrade any existing installations of the ClickView Player.

INSTALLATION AND USAGE

1. LDAP Configuration

1.1 Configuring the ClickView Access Manager

The LDAP Configuration tab allows you to configure the ClickView Access Manager and map your existing LDAP Groups to your customised ClickView Groups.

The syntax for the LDAP server address should be in the following format:

LDAP: //server name: port number format. You may also need to fill in your Base DN depending on your setup i.e LDAP: //myserver:389/DC=myschool,DC=edu,DC=au

Note: LDAP and DC are case sensitive.

The account used should have read access to the LDAP tree and the username should be in distinguished name format.

Note: If you find there are missing groups, this may be a result of not having access to view the entire tree.

1.2 Creating ClickView Groups

ClickView Groups are the groups that are used to assign permissions to an object on the ClickView Library Server. The main advantage of using the ClickView Groups over directly assigning permissions according to LDAP groups, is that it does not expose the internal LDAP structure to everyday users.

After making any changes, you should click the “Apply” button as the ClickView Library Server needs to be restarted.

2. ClickView Library Server Content and Lesson and Video Rating Access

The Library Content Access allows you to assign permissions to any object on the ClickView Library Server, including subject folders, lessons, videos, audio files, images or learning objects.

When you restrict access to an object on the ClickView Library Server it will be instantly hidden from users who have not been granted access.

2.1 Inheritance of permissions on the ClickView Library Server content and Lesson Access tabs.

When assigning permissions to an object on the ClickView Library Server, the new permissions will be inherited by all the children of that object. Furthermore, the inherited permissions will be combined with a child's existing permissions. For example:

Initial state

Child object has groups: Year 12, Year 11
Parent object: Irrelevant

Year 11, 10 dragged into the parent object

Child object has groups: Year 12, Year 11
Parent object: Year 11, Year 10

The child object inherits the permissions of the parent

Child object: Year 12, Year 11, Year 10
Parent object: Year 11, Year 10

2.2 Applying permissions to all objects on the ClickView Library Server

The “ClickView Library Server” and “ClickView Lessons” tree nodes are special nodes that are used to assign permissions to all objects on the ClickView Library Server.

3. LDAP Tools

This tab displays diagnostic information and allows advanced users to configure the ClickView Access Manager to work in conjunction with other LDAP servers.

If you are planning to utilise the ClickView Access Manager you will need to create a new profile and map your local LDAP server attributes to the equivalent attribute in our system.

This table describes what the attributes in the ClickView Access Manager refer to. You should choose the local LDAP attributes which closely resemble the attributes used by the ClickView Access Manager.

Required Attribute Name	Function
Member	The distinguished name of a child user/group
Member Of	The distinguished name of the group the object belongs to
DistinguishedName (deprecated)	The distinguished name of an object. i.e. CN=aStudent,DC=school,dc=edu,dc=au
CN (commonName)	The name of an object that displayed in the tree
samAccountName	The username used to log on to the network.

After mapping all the local LDAP attributes to the ClickView Group attributes, you should test the profile, which will show you the number of results returned by running a simple asterisk LDAP query on each of the attributes.

CLICKVIEW ACCESS MANAGER AND THE CLICKVIEW LIBRARY SERVICE

1. **Filtering Incoming connections**

When an incoming request comes from a ClickView Player, the list of available objects pass through two filters, both the filters must be satisfied for an object to be displayed on the ClickView Player.

Filter 1:

Library Content Access

If you belong to at least one of the allowed access groups then you are granted access.

Lesson Content Access

If you belong to at least one of the allowed access groups then you are granted access.

Filter 2:

Rating Content Access

If you belong to at least one of the denied access groups then you are denied access.

2. **ClickView Access Manager cache**

The ClickView Access Manager caches LDAP user information requests and LDAP group membership information to fasten the process of determining the membership of a particular user.

When a user first connects to the ClickView Library Server, the connection will take slightly longer than normal, subsequent connections will however return to normal speed.

If the ClickView Library Server Service is restarted then the cache is lost.

It is recommended that if any changes to the directory server occur, the administrator should also restart the ClickView Library Server Service, to purge any outdated cached information about a user's group membership.

3. **Potential security issues**

The ClickView Access Manager restricts access depending on the username that is returned from the ClickView Player.

If the machine that the ClickView Player is running on is logged in through the domain, their domain username will be detected. However, if you login locally then the ClickView Player will detect the local username.

The security risk here is that the username can be spoofed; if you have a local account name that is the same as someone's domain login name. It is therefore advised that all users login to the domain, rather than the local machine.

4. **LinkStart and LinkStart Plus**

LinkStart and LinkStart Plus links are also protected by the ClickView Access Manager.

CLICKVIEW ACCESS MANAGER AND THE CLICKVIEW LIBRARY SERVER/MANAGER

1. ClickView Access Manager with the ClickView Library Manager

The ClickView Access Manager disables the LDAP Configuration and Tools tabs when it runs from the ClickView Library Manager. This will allow an administrator to manage user access to the contents of the ClickView Library Server without having to deal with the underlying LDAP server configuration.

2. Permissions of new objects on the ClickView Library Server

Any objects added to the ClickView Library Server will inherit the permissions of its parent.