# Replication

Used to transfer content

* Publish (activate) content from an author to a publish environment.
* Explicitly flush content from the Dispatcher cache.
* Return user input (for example, form input) from the publish environment to the author environment (under control of the author environment).

# How Replication happens

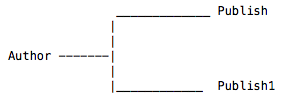
In a scenario of replication from author to publish, the content is **packaged** and placed in replication queue. A servlet in publish env receives the request and publishes the received content.

# Types of Replication

Chain Replication

http://2.bp.blogspot.com/-Med9NMfeWxM/UZkFmwjHjCI/AAAAAAAAADI/ltPVtopezyk/s1600/Chain.png **On Receive – used for chain replication**

Parallel Replication



**Replication bundle** – <http://host:port/system/console/bundles/com.day.cq.cq-replication>

At **<http://localhost:4502/etc/replication/agents.author/publish.html>**, we get to see the configurations of replication agents.

**Agent User Id**

Used to collect and package the content and also to write content to publish/dispatcher.

**Transport URI**

Specifies receiving servlet at target location

**HTTP headers**

CQ.

Two user id’s are given in the agents configuration.

One in **Transport** tab – this is **User** this is to connect to the target host

One in **Settings** tab – this is **Agent Id** this is to access the content on source host to package it & transport to target.

**Will all replication agents gets called when activating a content?**  
Yes, Every replication agents are invoked. Only the agent that has read access to the content gets replicated.

**Scenario**:

Create a custom Replication Agent

**TransportHandler** implementations controls the communication with target host .

*customReplicationAgent* implements **TransportHandler{**

|  |  |
| --- | --- |
| @Override | |
|  | | public boolean **canHandle**(AgentConfig config){  } |
| @Override |
|  | public ReplicationResult **deliver**(TransportContext ctx, ReplicationTransaction tx) | |
|  | throws ReplicationException {  } | |

**}**

**Content Builder** implementations are used to build the body of replication request.

**Scenario**:

How to replicate content at /content/a/b on host A to /content/b/c ?

This can be achieved using **ReplicationPathTransformer**

Useful resources

<http://aemfaq.blogspot.com/2013/05/chain-replication-sample.html>

<https://www.cqtutorial.com/courses/cq-admin/cq-admin-lessons/configure-cq-replication/cq-configure-multiple-replication-agent>

<https://www.blueacornici.com/2014/12/reverse-replication-customize-content/>

<http://www.nateyolles.com/blog/2016/01/aem-akamai-custom-replication-agent>

<https://www.slideshare.net/mwmd/adobe-experience-manager-replication-deep-dive>

<http://aemfaq.blogspot.com/2013/05/how-to-configure-replication-agent-to.html>

<https://blogs.perficientdigital.com/2017/08/11/how-to-transform-replication-urls-in-aem/>

<https://aemlounge.wordpress.com/2018/03/19/a-cookbook-for-replication-in-aem/>