

# Disaggregated Architecture

- [Distribution structure](#)
- [References](#)
- [Run time configuration](#)
  - [ONAP SDN-R Web Service Cluster](#)
  - [ONAP SDN-R Devicemanager cluster \(Opendaylight based\)](#)
  - [ONAP SDN-R DB Cluster](#)

## Distribution structure

Details: [Gerrit-Repos](#), [Distributions and Images](#)

Repository

- Overall Helm: OOM/SDNC
- Image creation SDN-R Devicemanager: sdnc/oam-installation
- Image creation SDN-R Webservice: ??
- feature definition: ccscdk/features-sdnr
- ccscdk/distribution: not used

## References

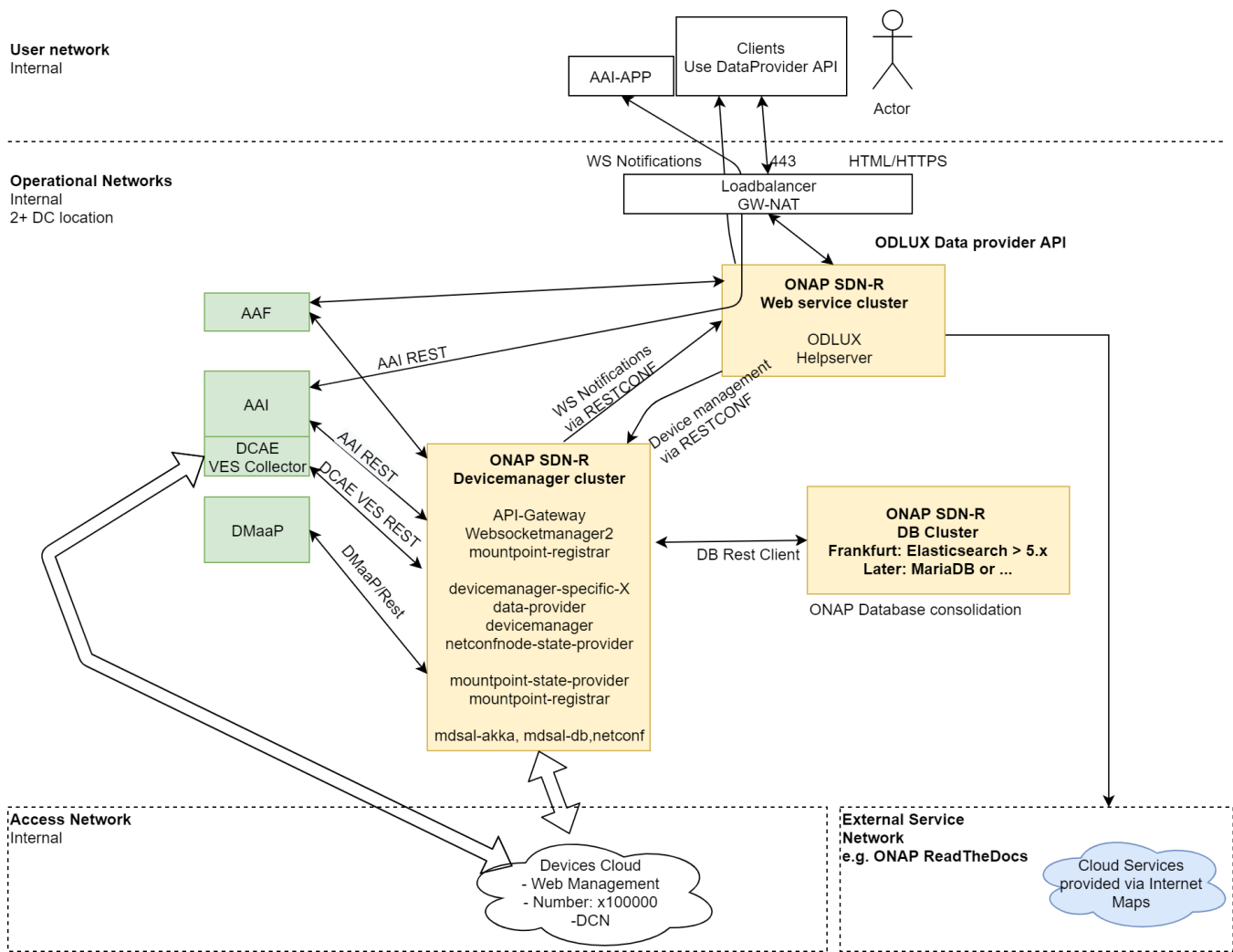
Related Jira: [SDNC-877](#) - Getting issue details... STATUS

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
<a href="#">SDNC-1013</a>	<a href="#">ODLUX - webservice cluster not using OSGi</a>		Jan 10, 2020	Feb 26, 2020		Michael Dürre	None	=	<span>CLOSED</span>	Done
<a href="#">SDNC-886</a>	<a href="#">Adjustment of UX clients to new dataprovider</a>		Sep 03, 2019	Jan 30, 2020		Unassigned	Alexander Dehn	=	<span>CLOSED</span>	Done
<a href="#">SDNC-885</a>	<a href="#">OOM for clustered disaggregated SDN-R</a>		Sep 03, 2019	Apr 24, 2020		Alexander Dehn	Alexander Dehn	=	<span>CLOSED</span>	Done
<a href="#">SDNC-884</a>	<a href="#">Support CoreModel 1.4</a>		Sep 03, 2019	Jan 08, 2020		Herbert Eiselt	Alexander Dehn	=	<span>CLOSED</span>	Done
<a href="#">SDNC-883</a>	<a href="#">Multi-technology support for devicemanager</a>		Sep 03, 2019	Jan 30, 2020		Herbert Eiselt	Alexander Dehn	=	<span>CLOSED</span>	Done
<a href="#">SDNC-882</a>	<a href="#">Websocket Notification Handling through webServices</a>		Sep 03, 2019	Jan 29, 2020		Michael Dürre	Alexander Dehn	=	<span>CLOSED</span>	Done
<a href="#">SDNC-880</a>	<a href="#">Extend and adapt SDN-R provider components</a>		Sep 03, 2019	Feb 20, 2020		Herbert Eiselt	Alexander Dehn	=	<span>CLOSED</span>	Done
<a href="#">SDNC-879</a>	<a href="#">Dataprovider for UX and backend</a>		Sep 03, 2019	Feb 26, 2020		Herbert Eiselt	Alexander Dehn	=	<span>CLOSED</span>	Done
<a href="#">SDNC-878</a>	<a href="#">Define disaggregated architecture</a>		Sep 03, 2019	Feb 26, 2020		Herbert Eiselt	Alexander Dehn	=	<span>CLOSED</span>	Done

9 issues

- [ODLUX DB API](#)

## Run time configuration



## ONAP SDN-R Web Service Cluster

- Web server with ODLUX functionality .. communication to ONAP SDN-R Devicemanager cluster via REST API
- Client login at Web service cluster via oauthv2 interface
- Proxy function to forward requests to SDNC cluster
  - WebSocket management, Handling of clients registration for WS
  - RESTCONF

Function	Description
ODLUX	<ul style="list-style-type: none"> <li>• Web server with Graphical User Interface ODLUX</li> <li>• For devicemanagement</li> </ul>
HelpServer	<ul style="list-style-type: none"> <li>• Help pages for Web Clients</li> </ul>
nginx	Proxy to internal SDNC cluster

## ONAP SDN-R Devicemanager cluster (Opendaylight based)

- Opendaylight based, Release neon
- Has functional user "webservice" for mountpoint management via RESTCONF
- Provides access to NETCONF devices
- Create/Remove Mountpoint in madsal-DB via RESTCONF (web-clients, mountpoint-registrar)
- Dataprovider-bundle provides abstract database schema.
- RESTCONF/Yang-API to provide data to WEB client

- Provides User database for WEB Clients

Bundles and libs	Description
API Gateway	<ul style="list-style-type: none"> <li>• Single access point of Web Clients to ONAP SDNR</li> </ul>
DataProvider	<ul style="list-style-type: none"> <li>• RPC for Web Clients and Devicemanager database access.</li> </ul>
Devicemanager-X	<ul style="list-style-type: none"> <li>• Bundles for NETCONF Devicemanagement for device group X relatated features</li> <li>• Yang model information for device group X related specifications</li> </ul>
Devicemanager	<ul style="list-style-type: none"> <li>• Devicemanager common functionality for Devicemanagers-X</li> </ul>
ODLUX	<ul style="list-style-type: none"> <li>• Web server, providing WEB Applications (Connect, Fault ...)</li> </ul>
Websocketmanager2	<ul style="list-style-type: none"> <li>• Provides websocket notifications to Web Clients</li> <li>• Provides RPC for devicemanager for notification forwarding</li> </ul>
mountpoint-state-provider	<ul style="list-style-type: none"> <li>• (<a href="#">SDNC-887</a>) Provides mountpoint status change via DMaaP</li> </ul>
mountpoint-registrar	<ul style="list-style-type: none"> <li>• (<a href="#">SDNC-887</a>) DMaaP Listener for mountpoint creation for new devices via VES</li> </ul>
common	<ul style="list-style-type: none"> <li>• <b>Provides lib</b> with common functions, used by bundles.</li> </ul>

## ONAP SDN-R DB Cluster

- Elasticsearch 6.x+ based
- Access to database by DataProvider bundle.
- Intermediate step to migrate to sql based DB like Maria-DB
- Database intitilization is part of initial cluster startup
- Data are e.g. RequiredNetworkElements, ConnectionLog, FaultLog, CurrentProblems, PerformanceData
- Uses NGINX and Elasticsearch provided docker images
- Integrates with AAF