

# Service Orchestrator Dublin Release

## DRAFT PROPOSAL FOR COMMENTS

The content of this template is expected to be fill out for M1 Release Planning Milestone.



### Info

Use the "Copy" and "Move" options (available under the ..., top right of this page) to duplicate this template into your project wiki. Use the Wiki to document the release plan. Don't provide PowerPoint. Use as much diagrams and flow charts as you need, directly in the wiki, to convey your message.

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## Overview

Project Name	Enter the name of the project
Target Release Name	Dublin Release
Project Lifecycle State	Incubation. Refer to <a href="#">ONAP Charter, section 3.3 Project Lifecycle</a> for further information
Participating Company (Alphabetical Order)	Amdocs, AT&T, Bell Canada, China Mobile, Ericsson, Huawei, Intel, Nokia, Orange, Tech Mahindra, VDF, ZTE

## Scope

### What is this release trying to address?

The Dublin Release will be focusing on the following areas:

- Platform Maturity (i.e., S3P items)
  - Resiliency
    - Level 2 - regression from Beijing, plug close gap on DB resiliency.
    - DB Resiliency was a limitation in Beijing due to the Active/Standby nature of MySQL. MariaDB w/Galera provides an active-active clustered configuration, which will support local fail-over.
  - Scalability
    - Level 1 will be a regression run on Dublin release - anticipate this to be test only
  - Stability

- Level 1 will be a regression run on Dublin release - anticipate this to be test only
    - Level 2 requirement is expected to be covered by the Integration team.
  - Security
    - Level 1 definition has changed in Dublin. Not clear we are achieve Level 1
    - Address outstanding items related to CII Passing Badge:
      - Clearing Critical and Medium Nexus IQ Security alerts **to the extent possible**
      - Addressing 2 other security related items from Passing Badge related to encryption
    - Secure DMaaP topics (**Dependency on DMaaP project**) - **Stretch Goal**
      - DMaaP indicated delivery would be Sept, plus
      - DMaaP story is still not written to enable APPC to assess impact at this stage.
- Documentation updates for Dublin, such as, but not limited to:
  - API Guide improvements
  - Developer guide
  - Release Notes
- Code Coverage for UI of the Monitoring Pages(Javascript) - TBD, no commitment at this stage

## Use Cases and Functional Requirements

Describe the use case this release is targeted for (better if reference to customer use case).

The use cases supported in Beijing release will continue to be supported as part of regression assuming all other components do likewise.CCVPN

SO will contribute to the following use cases as part of the functional requirements.

- VNFM SOL003 adapter support : Resources commitment from Ericsson and Nokia
- CCVPN extension : Resources commitment from CMCC, VDF, ZTE.
- Change Management Extension : Commitment based on support from ATT resources.(Scope TBD)
- PNF extension : Resource commitment from Nokia.
- HPA extension (Hardening) for the other existing usecases : Support from Intel
- Support Multi Cloud for cloud agnostic orchestration : Support from Intel and VMware.
- Consistent ID of a cloud region : Support from ATT (Testing effort)
- Internal architecture improvements and work towards modularity:
  - So Monitoring pagination
  - S3P
  - Documentation improvements
  - UT and CSIT improvements
- BBS : Resource commitment under discussion (Nokia/Huawei/Swisscom??).
- 5G Support : (Under discussion ATT/Intel/vmware/Ericsson/Amdocs??)
- Removal of Manual interventions : (Under discussion Tech mahindra, ATT...??)
- SOL005 adapter support : Resources from Verizon (under discussion of the usecase to be used is not yet clear)

## Minimum Viable Product







Same as was defined for Casablanca.

## Functionalities

List the functionalities that this release is committing to deliver by providing a link to JIRA Epics and Stories. In the JIRA Priority field, specify the priority (either High, Medium, Low). The priority will be used in case de-scoping is required. Don't assign High priority to all functionalities.

## Epics

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
SO-1508	ETSI Alignment - SO SOL003 plugin support to connect to external VNFM's		Feb 14, 2019	Aug 12, 2023		Byung-Woo Jun	Byung-Woo Jun		CLOSED	Done
SO-1468	Hardening of HPA in SO and extension of HPA capabilities to existing use-cases		Feb 06, 2019	Aug 12, 2023		Unassigned	None		CLOSED	Done
SO-1394	Extended and enhance the SO generic building block to support pre and post instantiation.		Jan 15, 2019	Jun 19, 2019		Unassigned	Yuriy Malakov		CLOSED	Done
SO-1393	Support the CCVPN Extension		Jan 15, 2019	Aug 12, 2023		Seshu Kumar Mudiganti	Seshu Kumar Mudiganti		CLOSED	Done

SO-1392	Support the BroadBand Service Usecase		Jan 15, 2019	Jul 10, 2019	Seshu Kumar Mudiganti	Seshu Kumar Mudiganti	=	CLOSED	Done
SO-1353	SO to be made independent of Cloud technologies		Nov 06, 2018	Aug 12, 2023	Unassigned	None	=	CLOSED	Done
SO-1273	PNF PnP Dublin updates & improvements		Dec 05, 2018	Jul 31, 2019	Unassigned	None	=	CLOSED	Done
SO-1271	PNF PnP Casablanca MR updates		Dec 05, 2018	Feb 06, 2019	Unassigned	None	=	CLOSED	Done
SO-677	Improve the issues and findings of the SO Casablanca Release		Jun 27, 2018	Aug 12, 2023	Seshu Kumar Mudiganti	Seshu Kumar Mudiganti	=	CLOSED	Done
SO-166	Non-stop operations required.		Sep 27, 2017	Jan 15, 2019	Unassigned	None	=	CLOSED	Done

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## Stories

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
SO-1974	Turn off OpenStack heat stack audit		May 31, 2019	Jun 05, 2019		Unassigned	None	^	CLOSED	Done
SO-1924	Add VnfConfigUpdate to the list of native CM workflows returned to VID		May 24, 2019	May 24, 2019		Unassigned	None	=	CLOSED	Done
SO-1820	Add Model Version Query		Apr 26, 2019	May 02, 2019		Unassigned	None	=	CLOSED	Done
SO-1806	Fix issue where null variable causes task to not		Apr 21, 2019	Jun 03, 2019		Unassigned	None	=	CLOSED	Done
SO-1793	add status for delete		Apr 16, 2019	Apr 22, 2019		Unassigned	None	=	CLOSED	Done
SO-1792	add status message requirement for create vf module event audit		Apr 16, 2019	Jun 03, 2019		Unassigned	None	=	CLOSED	Done
SO-1791	Moved base client to new location		Apr 15, 2019	Jun 03, 2019		Unassigned	None	=	CLOSED	Done
SO-1790	Enhanced sniro BB to account for sole service proxies to support 1908.		Apr 14, 2019	Jun 03, 2019		Unassigned	None	=	CLOSED	Done
SO-1765	Convert Tabs to Spaces		Apr 08, 2019	Jun 03, 2019		Unassigned	None	=	CLOSED	Done
SO-1760	Add Query param to pull back nested stack information		Apr 08, 2019	Jun 03, 2019		Unassigned	None	=	CLOSED	Done
SO-1758	Fix POM to allow HTTP long polling to work on camunda		Apr 08, 2019	Jun 03, 2019		Unassigned	None	=	CLOSED	Done
SO-1749	re add openstack audit of delete functions after refactor		Apr 04, 2019	Jun 03, 2019		Unassigned	None	=	CLOSED	Done
SO-1748	Add support to parse cdl inside LOB and platform		Apr 04, 2019	Jun 03, 2019		Unassigned	None	=	CLOSED	Done
SO-1737	if audit fails write sub interface data to a ai		Apr 03, 2019	Jun 03, 2019		Unassigned	None	=	CLOSED	Done
SO-1729	Monitor Job Status-Delete		Apr 02, 2019	May 02, 2019		Unassigned	None	=	CLOSED	Done

SO-1687	removed unused test classes and methods		Mar 20, 2019	Jun 03, 2019	Unassigned	None	=	CLOSED	Done
SO-1678	removed extra argument from extractByKey method		Mar 17, 2019	Mar 20, 2019	Unassigned	None	=	CLOSED	Done
SO-1676	replace all fixed wiremock ports		Mar 17, 2019	Mar 20, 2019	Unassigned	None	=	CLOSED	Done
SO-1671	skip_post_instantiation_configuration schema and tosca ingestion		Mar 15, 2019	Jul 10, 2019	Unassigned	Yuriy Malakov	=	CLOSED	Done
SO-1648	Increasing the test coverage of SO-Monitoring UI		Mar 13, 2019	Mar 21, 2019	Unassigned	Byung-Woo Jun	=	CLOSED	Done

Showing 20 out of [145 issues](#)

## Longer term roadmap

The long term road map is to achieve all the goals outlined in the approved project proposal; to be fully model and standards driven, be agnostics and make no assumptions about the network. Support configuration and lifecycle management of VNF/VNFC in a generic fashion so that on-boarding any new VNF/VNFC is just a matter of configuration and data. Longer term items include:

- Align to the modularity architecture proposed as part of ONAP by the architecture team.
- Support different types of clouds, working through Multi cloud;

## Release Deliverables

Indicate the outcome (Executable, Source Code, Library, API description, Tool, Documentation, Release Note...) of this release.

Deliverable Name	Deliverable Description	Deliverable Location
SO Docker Images	Executable	Docker image available on nexus3
MariaDB Docker Image	Executable	Docker image available on nexus3
SO Libs	Jar files	Available on nexus
Deployment Scripts	Chef recipes used to configure the Docker containers.	found on SO Git repositories

## Sub-Components

onap/so/api-handler-infra

onap/so/bpmn-infra

onap/so/catalog-db-adapter

onap/so/openstack-adapter

onap/so/request-db-adapter

onap/so/sdc-controller

onap/so/sdnc-adapter

onap/so/so-monitoring

onap/so/vfc-adapter

## ONAP Dependencies

List the API this release is expecting from other releases. Prior to Release Planning review, Team Leads must agreed on the date by which the API will be fully defined. The API Delivery date must not be later than the [release API Freeze date](#).

Prior to the delivery date, it is a good practice to organize an API review with the API consumers.

API Name	API Description	API Definition Date	API Delivery date	API Definition link (i.e.swagger)
SDC	APIs for distribute service models	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
A&AI	APIs for inventory data	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
SDN-C	APIs for network controller	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
APP-C	APIs for application controller	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
VF-C	APIs for Network Service	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Multi-VIM	APIs for Multi-VIM	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
OOF	APIs for placement and homing	Defined in Beijing	Delivered in Beijing	<a href="#">Interfaces Link</a>
DCAE	For PNF instantiation message from DCAE over DMAap	Defined in Casablanca	Delivered in Casablanca	<a href="#">Interfaces Link</a>

## API Outgoing Dependencies

API this release is delivering to other releases.

API Name	API Description	API Definition Date	API Delivery date	API Definition link (i.e.swagger)
API Name	API Description	API Definition Date	API Delivery date	API Definition link (i.e.swagger)
Create service instance	Create a service instance	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Delete service instance	Delete a service instance	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Create vnf instance	Create vnf instance	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Delete vnf instance	Delete vnf instance	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Create vf module instance	Create vf module instance	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Delete vf module instance	Delete vf module instance	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Create volume group instance	Create volume group instance	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Delete volume group instance	Delete volume group instance	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Create network instance	Create network instance	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Delete network instance	Delete network instance	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Get orchestration requests	Get orchestration requests	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Get a specific orchestration request	Get a specific orchestration request	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Create E2E service	Create E2E service	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Delete E2E service	Delete E2E service	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>
Query progress status	Query progress status	Defined in Amsterdam	Delivered in Amsterdam	<a href="#">Interfaces Link</a>

## Architecture

### High level architecture diagram

At that stage within the Release, the team is expected to provide more Architecture details describing how the functional modules are interacting.

Indicate where your project fit within the [ONAP Archiecture diagram](#).

Block and sequence diagrams showing relation within the project as well as relation with external components are expected.

Anyone reading this section should have a good understanding of all the interacting modules.

For details on the SO architecture, refer to the [SO User Guide](#).

### Platform Maturity

Referring to [CII Badging Security Program](#) and [Platform Maturity Requirements](#), fill out the table below by indicating the actual level , the targeted level for the current release and the evidences on how you plan to achieve the targeted level.

Area	Actual Level	Targeted Level for current Release	How, Evidences	Comments
Performance	0	1		<ul style="list-style-type: none"> <li>0 -- none</li> <li>1 – baseline performance criteria identified and measured</li> <li>2 &amp; 3 – performance improvement plans created &amp; implemented</li> </ul>
Stability	1 - project team 2 - Integration team Integration team did a 72 hour test in Beijing	1 - project team 2 - Integration team Assume Integration team will address Level 2 - 72 hour test in Dublin		<ul style="list-style-type: none"> <li>0 – none</li> <li>1 – 72 hours component level soak w /random transactions</li> <li>2 – 72 hours platform level soak w/random transactions</li> <li>3 – 6 months track record of reduced defect rate</li> </ul>
Resiliency	2	2  In Dublin we will address Resiliency at the DB level since that was a constrain in Beijing. this will be possible with the move to Maria DB w /Galera		<ul style="list-style-type: none"> <li>0 – none</li> <li>1 – manual failure and recovery (&lt; 30 minutes)</li> <li>2 – automated detection and recovery (single site)</li> <li>3 – automated detection and recovery (geo redundancy)</li> </ul>
Security	1	1?  Level 1 definitions in Dublin where changed.		<ul style="list-style-type: none"> <li>0 – none</li> <li>1 – CII Passing badge + 50% Test Coverage</li> <li>2 – CII Silver badge; internal communication encrypted; role-based access control and authorization for all calls</li> <li>3 – CII Gold</li> </ul>
Scalability	1	1		<ul style="list-style-type: none"> <li>0 – no ability to scale</li> <li>1 – single site horizontal scaling</li> <li>2 – geographic scaling</li> <li>3 – scaling across multiple ONAP instances</li> </ul>
Manageability	1	1  Recommendation for Dublin is Level 2; however, Level 2 requirements are unclear and cannot be committed to.		<ul style="list-style-type: none"> <li>1 – single logging system across components; instantiation in &lt; 1 hour</li> <li>2 – ability to upgrade a single component; tracing across components; externalized configuration management</li> </ul>
Usability	1	1  For Level 2  All new API's must adhere to the ONAP API Common Versioning Strategy and Documentation Guidelines; ?? Does this apply to Reboot?  Swagger 2.0? - dependent on what Oxygen supports  E2E tutorial ???		<ul style="list-style-type: none"> <li>1 – user guide; deployment documentation; API documentation</li> <li>2 – UI consistency; usability testing; tutorial documentation</li> </ul>

## • Testing and Integration Plans

Provide a description of the testing activities (unit test, functional test, automation,...) that will be performed by the team within the scope of this release.

Describe the plan to integrate and test the release deliverables within the overall ONAP system. Confirm that resources have been allocated to perform such activities.

- CSIT tests added as part of R1 will continue to be supported in R3
- Pairwise testing will be done in the WindRiver Dev lab similar to what was done in R3.
- Epics are created to track testing activities to address Platform Maturity items.

## • Gaps





This section is used to document a limitation on a functionality or platform support. We are currently aware of this limitation and it will be delivered in a future Release. List identified release gaps (if any), and its impact.

Gaps identified	Impact
To fill out	To fill out

## • Known Defects and Issues

Provide a link toward the list of all known project bugs.

Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
SO-2779	A deadlock occurred while execute sdncAdapter Callback message correlation.		Apr 02, 2020	May 28, 2020		Seshu Kumar Mudiganti	None	=	CLOSED	Done
SO-2638	SO Project Build error while migrating from Java8 to Java11		Feb 04, 2020	Jun 24, 2020		Seshu Kumar Mudiganti	None	=	CLOSED	Not a Bug
SO-2576	New option to configure multicloud in SO		Dec 18, 2019	Jan 28, 2020		Unassigned	None	^	CLOSED	Done
SO-2541	Camunda engine handles workflow exceptions, sdncadapterv1.bpmn hangs, and the business process takes a long time		Nov 27, 2019	Feb 23, 2022		Unassigned	None	=	CLOSED	Won't Do
SO-2497	Heatbridge bug make use of regionId instead of cloudSiteId		Oct 29, 2019	Dec 09, 2021		Unassigned	None	=	CLOSED	Done
SO-2496	Rollback fails for ConfigAssignVnf and ConfigDeployVnf		Oct 29, 2019	Feb 23, 2022		Unassigned	None	=	CLOSED	Won't Do
SO-2495	Heatbridge: Unable to proceed with any of the function related to "Orchestration Service"		Oct 29, 2019	Dec 09, 2021		Unassigned	None	=	CLOSED	Done
SO-2298	heatbridge doesnt fire		Sep 09, 2019	Feb 23, 2022		Unassigned	None	=	CLOSED	Won't Do
SO-2227	so query and aai are not matching on heatbridge		Aug 14, 2019	May 07, 2020		Unassigned	None	=	CLOSED	Done
SO-2207	so-openstack-adapter and so-catalog-db-adapter crashing in 4.0.0		Aug 08, 2019	Feb 23, 2022		Seshu Kumar Mudiganti	None	=	CLOSED	Won't Do
SO-2164	VfcInstanceGroup order parsing error		Jul 29, 2019	Mar 11, 2020		Unassigned	None	=	CLOSED	Done
SO-2084	Determine heat template needed to avoid preload for k8s workload		Jul 03, 2019	Feb 23, 2022		Unassigned	None	=	CLOSED	Won't Do
SO-2083	SO creates all Networks with default Name "ONAP-NW1"		Jul 02, 2019	Jun 30, 2023		Unassigned	Andreas Geissler	=	CLOSED	Done
SO-2082	Delete Network does not work correctly		Jul 02, 2019	Jun 30, 2023		Andreas Geissler	Andreas Geissler	^	CLOSED	Done
SO-2045	Error distributing workflow with a new VNF resource		Jun 24, 2019	Sep 18, 2019		Unassigned	None	=	CLOSED	Done
SO-2041	Code fix - OOM-so-bpmn-infra's Override.yaml file		Apr 23, 2019	Feb 23, 2022		Unassigned	None	v	CLOSED	Won't Do

SO-2039	vFW distribution fails at SO component only		Jun 19, 2019	Feb 23, 2022	Seshu Kumar Mudiganti	None	=	CLOSED	Won't Do
SO-2030	VNFM adapter to handle getOperation after VNF deleted		Jun 18, 2019	Jul 01, 2019	Michael Morris	Michael Morris	=	CLOSED	Done
SO-2029	NullPointerException thrown by EtsiVnfDeleteBB		Jun 18, 2019	Jul 01, 2019	Michael Morris	Michael Morris	=	CLOSED	Done
SO-2028	Provide a better method for entering SO cloud_site entry		Jun 18, 2019	Aug 12, 2023	Seshu Kumar Mudiganti	None	=	CLOSED	Won't Do

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## • Risks

List the risks identified for this release along with the plan to prevent the risk to occur (mitigation) and the plan of action in the case the risk would materialized (contingency).

Risk identified	Mitigation Plan	Contingency Plan
Resource commitment for certain requirements is not yet clear.	To check and get details for the sepcific requirements	Remove the requirements from the scope of Dublin

## • Resources

Fill out [the Resources Committed to the Release](#) centralized page.

## • Release Milestone

The milestones are defined at the [Release Level](#) and all the supporting project agreed to comply with these dates.

## • Team Internal Milestone

This section is optional and may be used to document internal milestones within a project team or multiple project teams. For instance, in the case the team has made agreement with other team to deliver some artifacts on a certain date that are not in the release milestone, it is erecommended to provide these agreements and dates in this section.

It is not expected to have a detailed project plan.

Date	Project	Deliverable
To fill out	To fill out	To fill out

## • Documentation, Training

- Highlight the team contributions to the specific document related to he project (Config guide, installation guide...).
- Highlight the team contributions to the overall Release Documentation and training asset
- High level list of documentation, training and tutorials necessary to understand the release capabilities, configuration and operation.
- Documentation includes items such as:
  - Installation instructions
  - Configuration instructions
  - Developer guide
  - End User guide
  - Admin guide
  - ...



### Note

The Documentation project will provide the Documentation Tool Chain to edit, configure, store and publish all Documentation asset.



Documentation updates planned for Beijing release are tracked under Documentation Epic: [SO-675](#)

## Other Information

- Vendor Neutral

If this project is coming from an existing proprietary codebase, ensure that all proprietary trademarks, logos, product names, etc. have been removed. All ONAP deliverables must comply with this rule and be agnostic of any proprietary symbols.

- Free and Open Source Software

FOSS activities are critical to the delivery of the whole ONAP initiative. The information may not be fully available at Release Planning, however to avoid late refactoring, it is critical to accomplish this task as early as possible. List all third party Free and Open Source Software used within the release and provide License type (BSD, MIT, Apache, GNU GPL,... ). In the case non Apache License are found inform immediately the TSC and the Release Manager and document your reasoning on why you believe we can use a non Apache version 2 license.

Each project must edit its project table available at [Project FOSS](#).

### Charter Compliance

The project team comply with the [ONAP Charter](#).