

# Casablanca Release Requirements

The page is intended to summarize all the requirements for Casablanca Release. These requirements will need to be prioritized to realistically fit within the [Casablanca Release Timeline](#).

This is not yet the Casablanca Release scope. Release Scope will be finalized by M1 Release Planning.

Projects intended to participate within [Casablanca release](#) are posted in wiki.

New projects proposal are [posted here](#). These projects need to be reviewed and approved by TSC.

Some of the Use Cases, Functional and non functional requirements are carried over from previous Amsterdam and Beijing Releases as they required multiple releases to be implemented.












The [Requirements extracted from SP lists of priorities for Casablanca](#) are covered either by the Use Case, the functional requirements, the non functional requirement or within a project scope of work.

- [Use Cases](#)
- [Functional Requirements](#)
- [Non Functional Requirements](#)





## Use Cases

Use Case	Owner	Projects or functional requirements impacted for Casablanca	Link(s) to High Level Design (HLD) /Low Level Design (LLD) (if any)	Dependency (from/to) another project(s)	T-Shirt Size (XS, S, M, L, XL)*	Project's Impact: Test Only (TO), Code (C)	Committed (C) /Partially Committed (P) or not (N) per Impacted projects	If Partially or not Committed, then what are the gaps per impacted project (people /FTEs; HLD /LLD; etc)	Company Engagement	Notes	M4 Status
vFW	AT&T	HPA				All: Test Only	N/A - part of regression tests	N/A - part of regression tests			
vDNS	AT&T	HPA				All: Test Only	N/A - part of regression tests	N/A - part of regression tests			
VoLTE	China Mobile	HPA				All: Test Only	N/A - part of regression tests	N/A - part of regression tests			
vCPE	<a href="#">Kang Xi</a>	HPA				All: Test Only	N/A - part of regression tests	N/A - part of regression tests			



HPA	<a href="#">Alexander Vuli</a>	VNFSDK (minor) SDC (minor) Policy OOF (minor) SO (minor) AAI, Multi-Cloud VNFROTS	<a href="#">HPA Enhancements (For Casablanca Release)</a>	Orange: 2  ATT: 2  China Telecom: 2  China Mobile: 1  Verizon: 2  Vodafone: 2	VNFSDK: none  SDC: VNFSDK, VNFD model  Policy: SDC  OOF: SO, Policy, AAI  AAI: Multi-Cloud	VNFSDK: M SDC:XS Policy: M OOF: S SO: S AAI: S/M Multi- Cloud: M	VNFSDK (C) SDC (TO/C) Policy (C) OOF (C) SO (C/TO) AAI (C) Multi-Cloud (C)	Policy: Committed based on Intel providing resources  OOF: Committed  VNFSDK: Committed  SDC: committed based on Intel contribution.  SO: committed  AAI: committed based on Intel resources.  Multi-Cloud: committed		Intel China Mobile AT&T VMware ARM		    Unresolv SDC - tv required  Update: on SDC address
Change Management - Flexible designer /orchestrator	<a href="#">Ajay Mahimkar</a>	SDC, SO, VID	<a href="#">Link to Slide</a>	Orange: 1  ATT: 1  China Telecom: 2  China Mobile: 2  Verizon: 1  Vodafone: 2	VID: on SO  SDC: on SO	SDC:XL  VID: M	Code: SO,VID, SDC	VID: Not committed (Note: VID part is "nice to have" - no dependency on VID from other projects)  SDC: committed based on Amdocs contribution  SO : Committed (with support from ATT resources)	VID: requires additional resources	AT&T, Amdocs		  <a href="#">Details</a>    <a href="#">Details</a>
Change Management - traffic migration	<a href="#">Ajay Mahimkar</a>	SDNC, APPC, VNFSDK	<a href="#">Link to Slide</a>	Orange: 1  ATT: 1  China Telecom: 2  China Mobile: 2  Verizon: 1  Vodafone: 2			Code: SDNC, APPC	SDN-C: committ ed  APPC: Not committed  Orange: Committed	APPC: Not enough details on requirements, plus limited resources	AT&T, Orange, Intel		  <a href="#">Details</a>    <a href="#">Details</a>
Change Management - 5G PNF software upgrade	<a href="#">Ajay Mahimkar</a>	SO, A&AI, Ansible/EC - test only support; SDNC /CCSDK- dev to incorporate 5G PNFs	<a href="#">Link to Slide</a>	Orange: 1  ATT: 1  China Telecom: 2  China Mobile: 2  Verizon: 1  Vodafone: 2				SDN-C: Committed		AT&T, China Mobile, Huawei		  <a href="#">Details</a>    <a href="#">Details</a>    Ansible j been sul related L support
Change Management - CM scheduler	<a href="#">Ajay Mahimkar</a>	OOF, VID  VID - Nice to have - the functionality can still be delivered with OOF only (scheduler would need to be invoked through CLI)	<a href="#">Link to Slide</a>	Orange: 1  ATT: 1  China Telecom: 2  China Mobile: 2  Verizon: 1  Vodafone: 2	VID on OOF	VID: S	Code: OOF, VID	OOF: Committed  VID: Not committed  (this can still be delivered with OOF)	VID: requires additional resources	AT&T		  <a href="#">Details</a>    <a href="#">Details</a>
Scaling  Closed Loop Scaling  (High Priority)	<a href="#">Scott Blandford</a>	Policy, CLAMP, SO, DCAE	<a href="#">Link to Slides</a>	Orange: 1  ATT: 1  China Telecom: 1  China Mobile: 1  Verizon: 3  Vodafone: 1	CLAMP: on Policy  Policy: on SO	CLAMP: M	Code: SO, CLAMP, Policy  Test: DCAE	CLAMP: Committed with risks (dependency on Policy)  Policy: Committed with risks (TBD)  SO: Committed  DCAE: Committed		AT&T		  All code submitted

<b>Scaling</b> Beijing Improvements (High Priority)	<a href="#">Scott Blandford</a>	APPC, SDNC, SO, AAI, VID			VID: on SO APPC: on SO	VID: XS AAI: XS	Code: APPC, SDNC, SO, AAI	<b>AAI:</b> Committed  <b>APPC:</b> Committed  <b>SDNC:</b> Committed  <b>SO:</b> Committed  <b>VID:</b> Committed		AT&T		 All code submitted  (VID is in test environment)
<b>Scaling</b> Controller_Topic_ID (Medium Priority)	<a href="#">Scott Blandford</a>	SO					Code: SO	<b>SO:</b> Committed		AT&T		 All code submitted
<b>Scaling</b> Homing and Capacity Check (Low Priority)	<a href="#">Scott Blandford</a>	Multi-VIM, OOF, SDNC, SO			OOF: on Multicloud and Policy	OOF: S	Code: OOF, SO, SDNC, Multi-VIM	<b>OOF:</b> Partially Committed	OOF: Resource issue if R2 solution needs to be extended for new policy constraints.	AT&T		 Pushed
<b>5G/PNF</b> Plug and Play	<a href="#">Benjamin Cheung</a>  <a href="#">Vimal Begwani</a>  <a href="#">Shekar Sundaramurthy</a>	SDC, SO, SDN-C, A&AI, CDT, Modeling, VID, DCAE, DMaaP	<a href="#">Link to Slide</a>	Orange: 2  ATT: 1  China Telecom: 3  China Mobile: 1  Verizon: 1  Vodafone: 2	VID: on SO	VID: S  AAI: XS? need clarification on what's expected  <b>OOF:</b> No impact	Code: VID  Test Only: SDC  Code : DCAE	<b>VID:</b> Committed based on Nokia's contribution  <b>SDNC:</b> committed  <b>SO:</b> Committed (with resources from Nokia)  <b>SDC:</b> support based on current sdc capabilities from Beijing.  <b>APPC:</b> No impact  <b>AAI:</b> No code change, only modeling changes  <b>OOF:</b> No impact  <b>DCAE:</b> committed  <b>DMaaP:</b> committed	<b>APPC:</b> Per review of slides, does not appear to be anything specific for APPC in Casablanca. Items mentioned are more longer term, roadmap items  <b>AAI:</b> Expecting this to be modelling /schema updates only but unclear. Need additional information and analysis by AAI SMEs  <b>OOF:</b> Additional information required on policies required for PNF placement  <b>DCAE:</b> Committed based on Nokia's contribution on PRH	AT&T, Nokia,	 Code has and submitted   SO Code Checks in DCAE.   E2E Test updated testing) ; whole file scenario (for testing)	
<b>5G/PNF</b> Software Version Reporting	<a href="#">Vimal Begwani</a>  <a href="#">Shekar Sundaramurthy</a>	CCSDK, SDN-C	<a href="#">Link to Slide</a>					<b>CCSDK:</b> committed  <b>SDN-C:</b> committed		AT&T		 A&AI has been deployed   Usage in Upgrade pushed to production
<b>5G/PNF</b> Lifecycle Management Support (Restart, Suspend of PNF)	<a href="#">Vimal Begwani</a>  <a href="#">Shekar Sundaramurthy</a>	SDN-C/SDN-R. Controller support for operations. SDNC (SDNR) dev to incorporate 5G PNFs	<a href="#">Link to Slide</a>					<b>OOF:</b> Supports Change Management Scheduling  <b>SDN-C:</b> Committed	Will address this via Change Management	AT&T, China Mobile, Huawei		 SDN-C I investigate sure SD Ansible.
<b>5G/performance Analysis and Optimization</b> High Volume and RT Data Collection of PM	<a href="#">Benjamin Cheung</a>  <a href="#">Vimal Begwani</a>  <a href="#">Shekar Sundaramurthy</a>	DCAE, DMaaP, SDN-R,	<a href="#">Link to Slide</a>	Orange: 2  ATT: 2  China Telecom: 1  China Mobile: 3  Verizon: 3  Vodafone: 3	DCAE: on DMAAP (native Kafka support)	<b>OOF:</b> M  <b>DCAE:</b> L	code change: OOF  Code : DCAE	<b>CCSDK:</b> committed  <b>SDN-C:</b> committed  <b>OOF:</b> No Impact  <b>DCAE:</b> Committed (based on Nokia contribution) with dependency risk	<b>OOF:</b> Limited resources	AT&T, Nokia,	 Code is Submitted  <b>DCAE:</b> Edge deployment support for R3, DDS-VES and new analytic platform (flink) not committed due to resource constraint	



<p><b>5G/performance Analysis and Optimization</b></p> <p>Bulk PM</p>	<p><a href="#">Oskar Malm</a></p> <p><a href="#">Vimal Begwani</a></p> <p><a href="#">Shekar Sundaramurthy</a></p>	<p>DCAE, DMaaP</p>	<p><a href="#">Link to Slide</a></p>		<p>DCAE: on DMAAP-DR</p>	<p>DCAE:L</p>	<p>code change: DMaaP</p> <p>Code change: DCAE</p>	<p>DCAE: <a href="#">DataFile Collector: Committed</a> (based on Ericsson Contribution) with dependency risk</p> <p>PMMapper - <b>Partial Commit</b> (Based on Ericsson contribution) + dependency risk – <i>Not a hard requirement</i></p>	<p>DCAE: Dependency on DMAAP-DR + PMMapper (<a href="#">Stretch goal</a>)</p>	<p>AT&amp;T, Ericsson</p>		 <p>DMaaP</p>  <p>File colle with a fe Update f 4: File cc</p>  <p>PM Map Dublin a</p>
<p><b>5G/performance Analysis and Optimization</b></p> <p>Optimization Framework Enhancements (Placement, Formulation, Solving)</p>	<p><a href="#">Sarat Puthenpura</a></p> <p><a href="#">Vimal Begwani</a></p> <p><a href="#">Shekar Sundaramurthy</a></p> <p><a href="#">Benjamin Cheung</a></p>	<p>OOF</p>	<p><a href="#">Link to Slide</a></p>			<p>OOF: M</p>	<p>code change: OOF</p>	<p>OOF: Committed to SON</p>		<p>AT&amp;T, Nokia, Reliance Jio</p>		 <p>All code</p>
<p><b>5G/Network-slicing</b></p>	<p><del><a href="#">Vimal Begwani</a></del></p> <p><del><a href="#">Shekar Sundaramurthy</a></del></p> <p><del><a href="#">Benjamin Cheung</a></del></p>	<p>Withdrawn from Casablanca release by the requirement owner</p>		<p>Orange: 3</p> <p>ATT: 3</p> <p>China Telecom: 1</p> <p>China Mobile: 2</p> <p>Verizon: 2</p> <p>Vodafone: 3</p>								

<p><b>Centralized Representation and Consistent ID of Cloud Regions,</b></p> <p><b>Plan B, Phase 1: Centralized Representation of Cloud Regions</b></p>	<p>Bin Yang</p>	<p>SO, Integration</p>	<p>Centralized Representation and Consistent Identification of Cloud Regions In ONAP</p>	<p>Orange: 1 ATT: 2 China Telecom: 2 China Mobile: 3 Verizon: 1 Vodafone: 1</p>			<p>code : SO, Integration</p>	<p><b>SO:</b> committed based on Intel's contribution</p> <p><b>Integration:</b> committed</p>			<p>To align MVP, propose alternative action plan B: break this requirement into 3 phases.</p> <p><b>Phase 1 is to centralize the representation of cloud regions;</b></p> <p><b>Phase 2 is to apply consistent ID</b> across all related ONAP projects.</p> <p>Phase 3 is to correlate and align data locations to AAI's cloud region. This phase requires further discussion, hence not listed here.</p> <p>Note on "Intel's contribution": This is the synergy effort with HPA, no further special changes needed here, hence this can be deemed as a dependency on HPA's impact on SO.</p>	<p>SO: will soon.</p> <p>Integration:</p>
<p><b>Centralized Representation and Consistent ID of Cloud Regions,</b></p> <p><b>Plan B, Phase 2: Consistent ID of Cloud Regions</b></p>	<p>Bin Yang</p>	<p>SO, VID, SDNC, OOF, VFC, UUI, MultiCloud.</p>	<p>Centralized Representation and Consistent Identification of Cloud Regions In ONAP</p>	<p>Orange: 1 ATT: 2 China Telecom: 2 China Mobile: 3 Verizon: 1 Vodafone: 1</p>	<p>VID/SDNC: on SO</p> <p>SO/OOF/VFC: MultiCloud</p>	<p>VID: XS</p> <p>MultiCloud: S</p> <p>VFC: S</p>	<p>code : SO, VID, SDNC, OOF, VFC, UUI, MultiCloud</p>	<p><b>SO:</b> not committed</p> <p><b>VID:</b> Not Committed</p> <p><b>SDNC:</b> Not committed</p> <p><b>OOF:</b> Committed</p> <p><b>MultiCloud:</b> Committed</p> <p><b>VF-C :</b> Committed</p> <p><b>UUI:</b> committed</p>	<p><b>SDNC:</b> Limited resources</p> <p><b>VID:</b> requires additional resources</p>			<p>MultiCloud</p> <p>VFC: no</p> <p>UUI: not</p>



S3P	Jason Hunt	<ul style="list-style-type: none"> <li>• Performance</li> <li>• Stability</li> <li>• Resiliency</li> <li>• Security (see below)</li> <li>• Scalability</li> <li>• Manageability</li> <li>• Usability</li> </ul>	Likely ALL depending upon TSC determination of new level requirements per category	<b>Materials</b>  Usability: New APIs adhere to Versioning strategy  Versioning & API Documentation on Recommendations  Manageability: Adherence to ONAP Logging Spec v1.2 (implementation of the spec will occur in Dublin - Logging Dublin Scope)	Portal: on AAF, MUSIC, OOM  VID, Policy, SDC, AAI: on Portal	Portal: XL	Portal: Code	<b>Portal:</b> Not Committed  <b>APPC:</b> Partial  <b>DCAE:</b> Partial  <b>SDC:</b> committed  <b>VID:</b> Partial (depends on Portal)  <b>AAI:</b> Partial
Security	Stephen Terrill		Note: This does not cover what is in S3P. However, based on that it is expected to have a certificate or use CADI to get certificates to enable secure communication  Pluggable authentication and Authorization (Use of CADI and ?): <ul style="list-style-type: none"> <li>■ JAVA projects to use CADI client and enforcement point</li> <li>■ Non-JAVA projects: Wait until there is multi-language.</li> <li>■ All projects either need to have certificates (for secure communication) (based on a common trust store of AAF). The certificate distribution can be part of deployment mechanism and will be further detailed.</li> </ul> Secure communication to xNFs (Security for 5G Use cases). DCAE, APPC, VFC? VNF requirements. ( <a href="#">Secure Communication to Network Functions</a> ) - TLS and/or SSH for netconf (APP-C, SDN-C, CCSDK) - HTTPS security for VES (DCAE) (with certificates, slowly deprecating username/password) <ul style="list-style-type: none"> <li>■ Description of how the xNFs will get their certificates (VNFreqs).</li> </ul> Vnf package security following SOL 004: SDC, VNFreqs, VNF SDC	<b>Materials</b>  CADI/AAF Integration: <ul style="list-style-type: none"> <li>• <a href="#">AAF Documentation</a></li> <li>• <a href="#">Client access to AAF</a></li> </ul>	Portal: on AAF  Test coverage (js): (1) js Sonar plugins activation  (2) min. 3 additional containers per application  => Jenkins enhancements  (3) Maven build to be updated  <b>Risk #1</b>  DMaaP on AAF  DCAE on AAF, OOM, DMAAP  OOF on AAF	Portal (CADI): M  DCAE: XL  SDC: L  Test coverage (js):  All: M/L	Portal: Code  SDC: code  VID: Code	<b>Portal:</b> Not Committed  <b>APPC:</b> Partial  <b>OOF:</b> Partial  <b>DCAE:</b> Not Committed  <b>SDC:</b> Partial  <b>VID:</b> Partial (depends on Portal)  <b>AAI:</b> Partial
Upgrade (from Beijing to Casablanca)	Helen Chen					All: XL		<b>APPC:</b> Not Committed  <b>CLAMP:</b> Not Committed  <b>DCAE:</b> Not Committed  <b>SDC:</b> not committed  <b>VID:</b> Not Committed  <b>AAI:</b> Not committed



Architecture Alignment	Chris Donley	<ul style="list-style-type: none"> <li>API improvement</li> <li>Realtime streaming</li> <li>K&amp;S Support (for VNFs)</li> </ul>	 <p>ONAP Cas... v2.pptx</p>		DCAE on DMAAP (for DR)	DCAE:XL		<p><b>DCAE:</b> Partial Committed (New service committed based on Ericsson /Nokia)</p> <p><b>SDC:</b> partial</p> <p><b>MultiVIM:</b> Committed</p> <p><b>External API:</b> Committed</p> <p><b>SO:</b> Partially committed</p> <p><b>A&amp;AI:</b> partially committed</p> <p><b>CCSDK:</b> committed</p>
HEAT support	Helen Chen Brian Freeman		<p>HEAT-based ONAP deployment support should be dropped once OOM-based ONAP deployment's issues are fully identified and resolved.</p> <p><b>Recommendation from TSC:</b> keep supporting HEAT in Casablanca for testing and integration purposes. However, HEAT won't be a gating item at Release Sign-Off.</p>		Portal: on OOM	Portal: S SDC:S	Portal: Code SDC: code	<p><b>Portal:</b> Not Committed</p> <p><b>APPC:</b> Will support Heat partially</p> <p><b>OOE:</b> Support HEAT for testing</p> <p><b>SDC:</b> committed</p> <p><b>VID:</b> Partially</p>
Internationalization language support	Tao Shen	<ul style="list-style-type: none"> <li>User Experience</li> </ul>	 <p>multi-language proposal.pptx</p> <p>Design language/internationalization component in Portal and provideserviceapistopartnering apps like Policy, VID, SDC, AAI</p> <p><b>Note:</b> This will need to go through the whole process (Architecture review,...) to understand whatthesdk will be providing and dependenciesonother ONAP project (Portal, SDC,...)</p> <p><b>As per Lingli and Tao from chinamobile, this is reviewed and approved by Arch Team.</b></p>		UsecaseUI: on Portal	Portal: L	Portal: Code	<p><b>Portal:</b> Partial</p> <p><b>APPC:</b> Not Committed</p> <p><b>CLAMP:</b> Not Committed</p> <p><b>SDC:</b> Not committed</p> <p><b>VID:</b> Not committed</p>

Testing	Helen Chen	<ul style="list-style-type: none"> <li>Unit tests</li> <li>CSIT tests</li> </ul>	<p>Most UI projects with javascript.</p> <p><b>Recommendation from TSC:</b> This is related to Code Coverage: recommendation is to keep 50% Code Coverage for Casablanca including JavaScript. (In Beijing Release code coverage was only covering Java and Python code, not javascript)</p>	Linux Foundation Unit test and CSIT coverage framework,	Portal: XL SDC:S VID:S	Code: portal, SDC, VID	<p><b>Portal:</b> Partial (no Javascript)</p> <p><b>APPC:</b> Partial, Java code will maintain 50%, no commitment for Javascript</p> <p><b>CLAMP:</b> Partial, Java code will maintain 50%, no commitment for Javascript</p> <p><b>DCAE:</b> Partial (except javascript)</p> <p><b>SDC:</b> maintain 50% coverage for java and python</p> <p>add 10% coverage for UI (java script)</p> <p><b>VID:</b> maintain 50% coverage for java</p> <p>add 10% coverage for UI (java script)</p> <p><b>AAI:</b> Partial, Java code will maintain 50%, add 10% coverage for sparky (javascript)</p>
modeling	Hui Deng		<p>SDC: needs to support composite pattern in R3</p> <p>SDC/SO/A&amp;AI needs to support Service Order, Service Catalogue, service scaling</p> <p>Modeling runtime needs to be supported by A&amp;AI in release 3</p>				<p>SDC: not committed</p> <p><b>SO</b></p> <p><b>A&amp;AI</b> - changes to the run-time schema require significant refactoring in all of AAI's client applications. That refactoring might be planned and addressed in R4; for R3, perhaps mapping existing runtime schema to new model definitions can suffice?</p>

★ T-Shirt Size: Ballpark estimation for assessing the development/testing activities performed by the project team; not the integration team

- XS - <4 Man/Weeks;
- S - ~6 Man/Weeks;
- M - ~8 Man/Weeks;
- L - ~12 Man/Weeks;
- XL - > 12 Man/Weeks.