Notes from Three Meetings and emails to discuss including the SW Version in HEAT in support of Service Upgrades Held on 6/3, 6/8 and 6/15.

6/15 Meeting Notes

Keep in mind that for the G release Nokia and Ericsson will be handling all of the development except possibly the inclusion of “SW Version” property in the generic vnf structure in AAI. AT&T already has this in ECOMP and we are waiting to see if they can push it to ONAP for the G Release. For future releases beyond “G” AT&T may be requested to support additional feature such as entering the SW version in VID, having SO update the SW version in AAI during a vNF inPlaceSWUpdate and/or changing how SDC increments model versions.

To clarify the previous meetings Chris and Ofir exchanged emails. This was also discussed with Lukasz and Zu at the 6/15 meeting, however, since it was not imperative to make a decision for the G release, the team did not converge on final decision, but wanted to document the design ideas.

Clarification: It is up to the user to choose what action to take even though the model ID incremented.  The one additional action we need is for SO to update the model version/ID in AAI when the user chooses to perform the InPlaceUpdate for a minor version change.

Where X= AllaCarte or Macro

* Use Case 1: vNF already Exists and Instantiation type = X/Update, then the user can perform an InPlaceSWUpdate
* Use Case 2: User is instantiating a new vNF and instantiation type = X/Default. The user does not need to enter a SW Version at the VID interface.
* Use Case 3: User is instantiating a new vNF and instantiation type = X/Update. The user is required to enter a SW Version at the VID interface.

Additional Questions:

* Rather than have the user enter the SW version at VID, can the SW version be included in the pre-load?
* Further discussion is required around having a new property in the vnf model to indicate the type of upgrade that is required similar to the instantiation type.
* The vnf model version would increment when the Instantiation Type was changed, so why not update the HEAT with the SW Version too?  Then the user doesn’t have to enter it at VID when instantiating.  The user would only enter the SW version when performing an InPlaceSWUpdate. Since we don’t access the HEAT, but the user would still need to enter the SW verions but could look it up in the model versus having to track it on paper.  The existing InPlace workflow would need two enhancements – SO has to update the SW Version and vNF model version.  We also have to look at how updating the vnf model version impacts the service version and how do we handle that. Note: the user already provides the new SW version at the VID interface for an InPlaceSW Update.

6/8 Meeting Notes

Attendees:

* Lukasz Rajewski, Orange
* Zu Qiang, Ericsson
* Chris Rapposelli-Manzo, AT&T
* Ofir Sonsino, AT&T
* Ittay Stern, AT&T
* Someone else was on the call – Who was it? Michela Bevilaqua?

Notes form the 06/08/20 Meeting

The focus of today’s meeting was to discuss and obtain agreement of how VID and SDC would support the addition of the SW Version to the HEAT template with regard to instantiation and minor SW upgrades that utilize an In Place SW Update change management process.

* All agreed that the SW version property included in the HEAT template needs to be Optional. This removes impacts to SDC.
* VID agreed that requiring the user to enter the SW Version would be necessary as well as an improvement to the user experience. The value would then be passed to SO. They also stated that it is a rather small change. We did discuss having VID extract all SW versions for the vNF type to be instantiated from AAI, however, it was agreed to table that idea for now and until the VID/AAI queries are more efficient.
* SO would be impacted as it would now have the responsibility to write the SW version value to Generic vNF Resource structure in AAI. The default SW version will be included in HEAT if VID tells it to use the default or to use the SW version entered by the user. [Please correct this… Did we agree that the user will always enter the SW version, even upon the very first instantiation of a vNF? In other words, SO would not look at the value in HEAT and the user would always be required to provide a value for the SW version.]
* The AAI Generic vNF structure needs the SW Version property added to it. This property is already included in ECOMP. Ericsson and Orange asked if AT&T can push that change to ONAP.
* SDC will allow another indicator for the Instantiation type called “Update” indicating the SW Version in the HEAT is the default value but that a minor SW Update not requiring re-instantiation exists and should be entered at the VID interface when instantiating a new vNF. [The team later agreed that we need4 values for the Instantiation type: Macro/Default, alacare/Default, Maco/Update and alacate/Update].

Notes from the 6/03/20 Meeting.

* Lukasz Rajewski, Orange
* Zu Qiang, Ericsson
* Chris Rapposelli-Manzo, AT&T
* Tali Fridman, AT&T
* Lynn Williams, AT&T
* Andy Mayer, AT&T
* Ofir Sonsino & Xiaolian Bi, AT&T, attended the previous meeting

Discussion Points regarding including the SW version in the HEAT were a concern because a SW Update would change the SW version in the HEAT causing the vNF model version in SDC to be incremented then causing re-distribution and re-instantiation of the vNF. This would undermine the purpose of the vNF In Place SW Update process for minor SW updates. The Use Case of Schema change meaning functionality change to the vNF thus requiring re-instantiation is accepted and not an issue. The discussion of a viable solution was for the Minor SW Update Use Case – No Schema Change.

1. Inclusion of Optional SW version property with default value in HEAT is acceptable with additional updates to SDC and VID as described below for the full end to end solution. It is understood that these enhancements extend the initial Non-Schema Change Use Case and will take time to implement.
2. For now, the SW version property can be ignored to maintain the current instantiation and SW Update procedures. The SW version in the HEAT would not be updated for a minor SW version so as not to increment the model version. The SW version would be tracked as it is today on paper. The SW version value in the HEAT can be included for PNFs.
3. Future End to End Solution
	1. SW version would be mandatory entry in VID (enter default as displayed from HEAT or later version)- It could be a manual entry from user to start out and later move to a drop down where VID extracts all existing SW versions for the vNF type (invariant) from AAI. Also note that in the case of instantiation of a new model version, the default value can be extracted from the model. Since the value is from the HEAT, you will have default value per each module within the VNF
	2. In ASDC, the designer would be given the choice to perform an Upgrade or a new instantiation when the SDC model changes.
	3. Proposal to be discussed further: SDC to provide an indication (maybe a minor version increment) so the user knows if the change made to the vNF model requires only an Upgrade or a full re-instantiation and possibly use the instantiation type property to indicate that an upgrade only or an instantiation (Macro/AlaCarte) is needed.
	4. Modifications to SO to obtain the SW version from VID and write it to the Generic vNF data structure in AAI required.

Need VID (Ittay and Ofir needed) for discussion regarding PNF SW Upgrade and Upgrade/instantiate as addition values to existing property for instantiation type (currently Macro, AlaCarte …). This meeting is now scheduled for 6/8 at 9am.