



# **Sonus End of Product Sale (EOPS) Policy**

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## 1 SCOPE

Sonus hardware and software products (Products) and the services that support the Products (Support Services) move through natural product lifecycle phases which include introduction, deployment, growth and ultimately End of Product Sale (EOPS) and End of Support Life (EOSL). The movement through these lifecycle phases is based on speed of innovation, market demand, component availability and customer requirements. This Policy focuses on the latter stages of the Sonus lifecycle management, the End of Product Sale (EOPS) process for Products and Support Services.

This Policy applies to all Sonus Products and related Support Services sold under the Sonus brand names of Sonus and NET.

Sonus reserves the right to amend or change this Policy in its sole discretion at any time. This Policy shall not be interpreted to create any contractual obligation by Sonus to provide Products or Support Services to any specific customer, channel partner, service provider or other purchasers (except if agreed otherwise under an executed individual purchase agreement). Sonus is not responsible or liable for any EOPS commitments made by a channel partner to its end customers regarding Sonus Products or Support Services (except if agreed otherwise under an executed purchase agreement).

## 2 EXCEPTIONS

This Policy provides a set of EOPS lifecycle practices and timelines as a guide, and Sonus endeavors to provide Product and Support Service offerings in accordance with this Policy. Sonus reserves the right to amend or change this Policy in its sole discretion at any time. This Policy shall not be interpreted to create any contractual obligation by Sonus to provide Products or Support Services to any specific customer, channel partner, service provider or other purchasers (except if agreed otherwise under an executed individual purchase agreement). Sonus is not responsible or liable for any EOPS commitments made by a channel partner to its end customers regarding Sonus Products or Support Services (except if agreed otherwise under an executed purchase agreement).

This Policy should be used as a guide so that customers can proactively plan for product lifecycle changes. However, it may not always be possible for Sonus to adhere to this guide so EOPS for Products and Support Services may vary.

### 2.1 Variance by Theatre



This Policy is global; however, there may be differences in Product and Supports Service availability depending on geographic region and location. Questions regarding Products and Supports outside the US should be addressed by the appropriate Sonus Sales Area Theatre Manager.

## **2.2 Third Party Products**

This Policy does not apply to third party branded Products resold by Sonus unless otherwise stated. The original manufacturer's EOPS policies will apply to third party Products and Support Services resold by Sonus.

For any third-party Products required for a Sonus solution to operate, it is the responsibility of the customer to maintain for the third-party Products a current and supported environment including the software applications, hardware, databases, and operating systems to receive Support Services from Sonus. If a third-party vendor retires support for its Product, customer may be required to upgrade to a certified and supported Product as required by Sonus.

## **3 GENERAL PRODUCT LIFECYCLE TIMELINES**

All Sonus software and hardware Products have a lifecycle during which the Product is introduced and generally available for purchase for a period until Sonus discontinues manufacture of the Product on the Sonus announced End of Product Sale (EOPS) date. After the EOPS date, the Product is no longer available for purchase. Although Support Services for an EOPS Product will continue to be available for a period until the Sonus announced End of Support Life (EOSL) date for that Product. After the EOSL date, Support Services are no longer available for that Product (except for certain Products at Sonus' sole discretion may be eligible for continued limited TAC only support services) Sonus provides ongoing EOPS status notifications as a Product moves through its lifecycle.

There are three key dates involved in product lifecycle.

- GA or General Availability refers to the time that a Product is available for purchase and use in production by customers.
- EOPS or End of Product Sale means the period that the Product is still supported but is no longer available for purchase.
- EoSL or End of Support Life means the time when standard support is no longer provided by Sonus.



## 4 END OF PRODUCT SALE NOTIFICATION

The End of Product Sale notification for a Sonus Product will be distributed via an EOPS bulletin generally:

1. One year before the Manufacturing Discontinuance (MD) for Sonus HW Product is announced as the End of Product Sale date.
2. One year before End of Support Life Date for Sonus SW Product is announced as End of Product Sale date.

The EOPS bulletin follows the Telcordia standard GR-209 format and includes the following information:

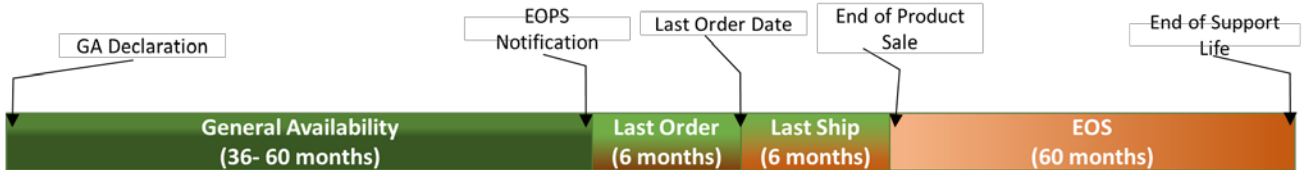
- End of Product Sale (EOPS) Notification Date
- Last Order Date
- Manufacturer's Discontinuance Date
- End of Support Life Date
- Affected EOPS product codes
- Replacement product codes (if applicable)
- Recommended migration options

## 5 HARDWARE END OF PRODUCT SALE (EOPS)

### 5.1 General Hardware Lifecycle Timelines

The following timelines summarize the key events during product lifecycle management for different Sonus Hardware Products as described below. The indicated time periods are a general guide and may vary for an individual Hardware Product.

#### 5.1.1 GSX Chassis and Cards



#### 5.1.2 Session Border Controllers (SBC)



#### 5.1.3 All Other Sonus Products





### 5.2 End of Product Sale Hardware Policy

The following table illustrates the timeline for End of Product Sale (EOPS) and End of Support Life (EOSL) for Hardware Products as a general guide. Note that the End of Support Life (EOSL) timeline differs on a per product basis: 72 months for Sonus GSX chassis' and cards, 60 months for Sonus Session Border Controllers (SBC) and third-party hardware and 48 months for all other Sonus branded products. All the indicated milestone time periods in the table below are a general guide and may vary for an individual Hardware Product.

| Milestone                               | Definition  | Timeline Goals |
|---|---|----------------|
| EOPS – End of Product Sale Notification | Date that the Sonus Bulletin is issued for customer notification of a Product which will be discontinued. This Sonus Bulletin indicates scheduled dates for the remaining EOPS milestones.  | Month 0        |
| LOD – Last Order Date                   | Last date that an order may be placed for the Hardware Product.   | Month 6        |
| MD – Manufacturing Discontinuation      | Last date Sonus Manufacturing will manufacture the Hardware Product to customers which is the Hardware Product EOPS date. After this EOPS date, Sonus Manufacturing will no longer builds, packages, or maintains stocking levels of the hardware product. However, Sonus Customer Service will maintain adequate stock to meet Sonus Support Service obligations and RMA process | Month 12       |
| EOSL - End of Support Life              | Date that Sonus Customer Service discontinues all support for the Hardware Product.   | Month 48/60/72 |

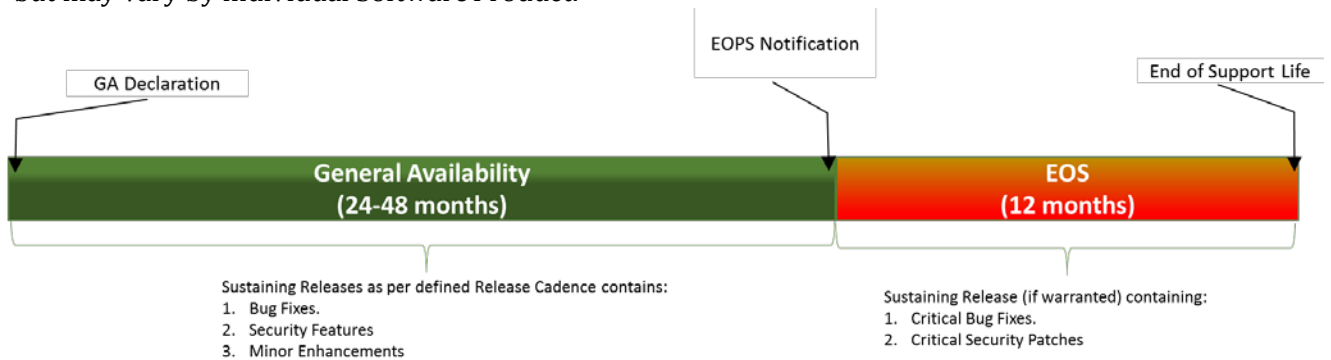
### 5.3 Support Services

Sonus generally supports Sonus Hardware Products for a minimum of four (4) years beyond the Sonus End of Product Sale (EOPS) date as announced by Sonus. However, Sonus will generally support Sonus GSX chassis' and cards, Sonus Session Border Controllers (SBC) and third-party hardware for a minimum of five (5) years beyond the Sonus End of Product Sale (EOPS) date. After the End of Support Life (EOSL) date for a Hardware Product, all Support Services for that Hardware Product and the software on that Product will completely cease, including, but not limited to, hardware repair, replacement sourcing, software defect resolution, and operating system support. Any program exception(s) for Post EOSL Product support, if any, to this Hardware EOSL policy will be defined and documented under the respective product program for the applicable Hardware and Software Product (e.g. TAC Only EOSL Support; transfer of current software from EOSL hardware to different approved current Hardware Products).

## 6 SOFTWARE END OF PRODUCT SALE (EOPS)

### 6.1 General Lifecycle Timeline

The following timeline summarizes the key events during product lifecycle management for Sonus Software Products as described below. The indicated time periods are a general guide but may vary by individual Software Product.



#### Please Note:

1. General Availability and EOS durations mentioned here are for general guidance only. Lifecycle duration can vary on per SW Release and product basis.
2. Sonus may be required to make an exception to lifecycle due to following:
  - a. End of Support on Third Party HW/SW solution bundled as part of Sonus product offering.
  - b. Critical security vulnerability requiring Sonus to modify design/ solution architecture or third party solution.

### 6.1 Software Release Cadence

Sonus additionally provides release cadence for new gen software solutions as it gives our customers good visibility for upgrade planning. Following are the salient points of this new release cadence:

1. Sonus shall GA new Major Feature SW Release (Yellow SW Release in illustration below) in April every year.
2. For every SW release train Sonus will support upgrade from prior 2(Two) major SW Releases. For example: SW Release 8.0 will support upgrades from SW Release 7.x and SW Release 6.x.
3. There will be two follow-up Minor Feature SW releases (Green SW Release in illustration below) tentatively in Aug and November of that year containing new features and enhanced functionality.
4. All bug fixes to customer reported on a given SW Release will be fixed in latest SW release on that SW release train. For instance: Issues reported in SW feature R6.0 (or SW R6.1) post GA of SW Release 6.2 would be fixed at earliest in SW Release 6.2.1.
5. Post two follow-up Minor Feature SW releases to a Major Feature SW Release there would be quarterly software sustaining releases (Blue SW Release in illustration below) containing bug fixes and latest security patches till EOPS notification on this SW Release Train.

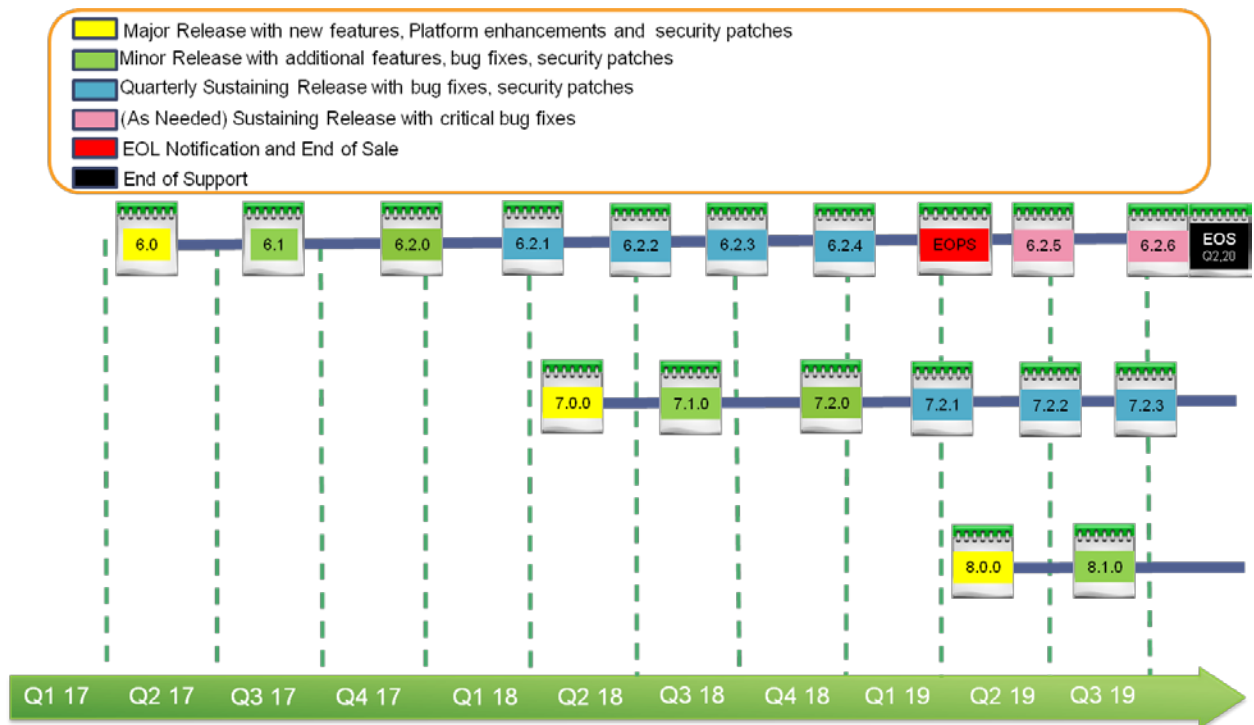


- Post EOPS notification on a given SW Release Train, Sonus would be obligated to provide further sustaining releases only (Pink SW Releases in illustration below) for critical issues (please refer to note below).

*Note:*

Critical Issue is broadly defined as customer experiencing a network outage that prevents its customers from accessing service and for which there is no workaround or recovery action possible.

The illustration below explains the SW release cadence for SBC 5k/7K/SWe product line as an example and its impact on SW lifecycle (Please refer to latest Sonus Product Roadmaps for most current information):





The Matrix below indicates tentative schedule for various Sonus products adhering to above defined SW Release Cadence:

| Sonus Product Line  | Adheres to New SW Release Cadence? | Starts from (SW Release, Year) |
|---------------------|------------------------------------|--------------------------------|
| <b>SBC5K/7K/SWe</b> | Yes                                | Release 6.0, 2017              |
| <b>EMS</b>          | Yes                                | Trunking SW Release 10.1, 2017 |
| <b>PSX</b>          | Yes                                | Trunking SW Release 10.1, 2017 |
| <b>DSI</b>          | NA                                 |                                |
| <b>GSX/ SBC9000</b> | NA                                 |                                |
| <b>DSC8000/SWe</b>  | NA                                 |                                |
| <b>SBC1K/2K</b>     | NA                                 |                                |
| <b>NetScore</b>     | NA                                 |                                |
| <b>WebRTC</b>       | NA                                 |                                |



## **6.2 End of Product Sale Software Policy**

Sonus generally supports the latest Major Release for a maximum duration of 5 (Five) years. Sonus at any given time shall support current (or latest) Major Release and the preceding two Major Releases and all Minor Releases respectively thereunder for a Sonus Software Product (i.e. Current Major Release plus 2 prior), at the time of the new Major Release.

Sonus shall issue EoPS notification on a SW release in event of either of below mentioned scenarios whichever happens earlier:

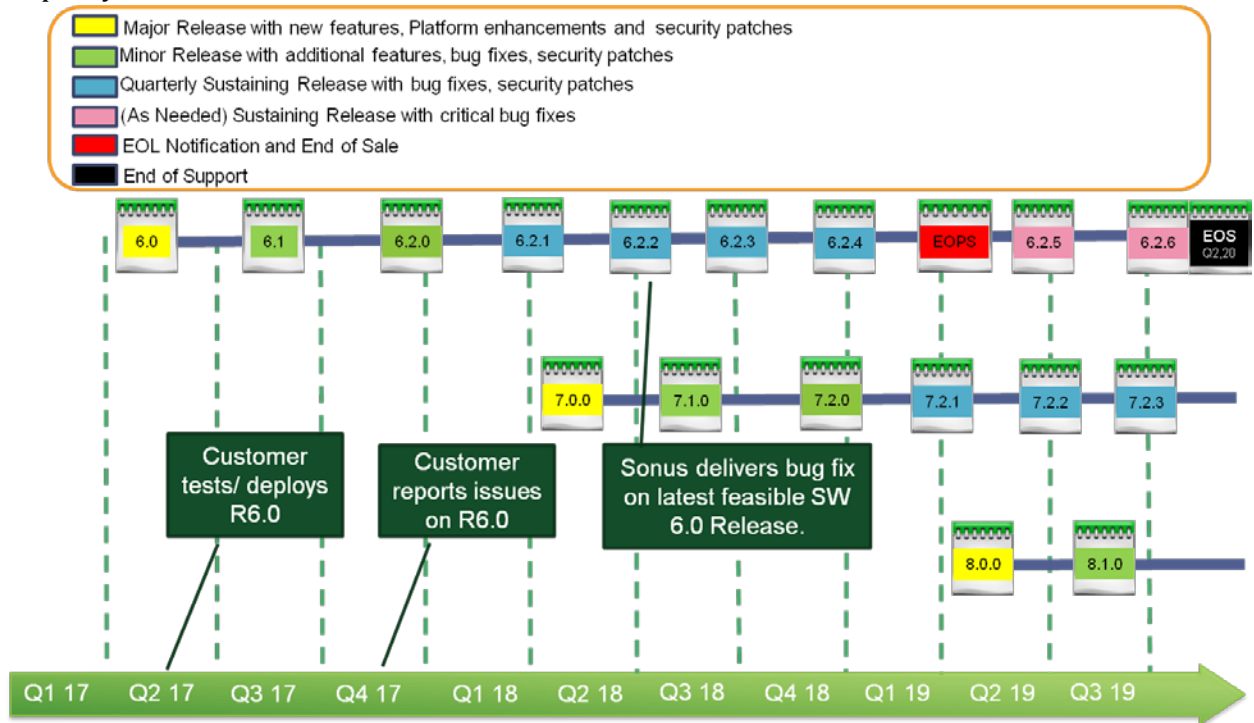
1. Completion of a 4 year duration for a SW Release.
2. GA of two succeeding Major Releases.

Sonus support obligation shall cease within twelve (12) months from the date of EoPS notification.

- Example: A Major Release R15.0 GA in March 2017, will undergo EoPS in March 2021 upon completion of a 4 year duration provided Sonus does not GA R17.0 before March 2021. However, if Sonus does GA R17.0 in August 2019, EoPS notification for R15.0 would come into effect in August 2019 as per the above mentioned criteria.

### 6.3 Bug Fixes

New bug fixes will only be created for SW releases within the current and preceding supported Major Release for a Sonus Software Product. All bug fixes will only be provided only on the latest head of train SW releases. The illustration below highlights the Sonus Bug fix policy:



Bug fixes for issues reported on SW Release under EoPS notification will be delivered only on the head of train of the SW releases under active support (i.e., SW release under active development and is not under EoPS). Sonus will be liable to fix only critical issues for SW Release post EoPS notification.

- Example If a customer finds a Major/Minor bug on 6.2.3 SW Release (refer to diagram above) post Q2 2019 (i.e., post EOPS notification on 6.x SW Release Train), customer would be provided the fix only on one of the active SW Release trains i.e., SW Release 7.x/8.x in this case.

Sonus reserves the right to terminate support after the above minimum period of Software support has been provided.

- Example: If release 15.x is the terminal version of the product, (i.e. no 16.0 version planned), then Sonus may opt to discontinue support for version 14.x after the above minimum period of support has been provided.

#### **6.4 Hardware Platform**

Notwithstanding the foregoing, the EOSL date for Software Products may be impacted if the related hardware product platform is discontinued by the announcement of End of Product Sale (EOPS). See Hardware section above.

#### **6.5 Supported Software on End of Service Life Hardware**

Once the Hardware that supports a piece of Sonus Software has gone EOSL, Sonus will provide limited support for current certified Sonus application Software on End of Support Life (EOSL) Hardware until the End of Service Life of that certified Software branch. This applies only to Sonus application software –not operating system software or third party software. At Sonus' discretion Sonus may not renew maintenance agreements for Sonus Software on EOSL Hardware. Sonus does not guarantee performance levels for any Software on EOSL Hardware, nor does Sonus test any new or existing software releases on EOSL Hardware after the Hardware EOSL date.

### **7 SOFTWARE SUPPORT BETWEEN HARDWARE EOPS & EOSL**

#### **7.1 EOPS Hardware**

Sonus generally supports new Sonus Software Releases on Sonus EOPS Hardware Products provided the Software Release is Explicitly Certified by Sonus for the EOPS Hardware Product and subject to Software support limitations below. Sonus will continue to support the Sonus Software on the EOPS Hardware Product until the applicable Software Product EOSL date, or the applicable Hardware Product EOSL date, whichever is sooner. (See sections above on Software and Hardware EOSL) "Explicitly Certified" means the release notes associated with the applicable Sonus Software explicitly identifies the Sonus EOPS Hardware Product as a valid platform to execute the Sonus Software. Inclusion of a Software Release on a product roadmap presentation or other documents does not represent explicit certification.

#### **7.2 Support Limitations**

Software support for a Sonus Hardware Product after the EOPS date (until the EOSL date) is subject to the following limitations. Software updates and upgrades may change the performance characteristics of the Sonus products and system due to the incremental software. Customer is responsible for updating and expanding its systems as required to accommodate the incremental software including the purchase of any hardware upgrades or replacement hardware as may be required to run the new or updated software.

- Sonus cannot guarantee the availability of any future major or minor Sonus Software Release for a Hardware Product which is EOPS.
- Sonus cannot guarantee the availability of any new or existing Software feature for a Hardware Product which is EOPS.
- Sonus cannot guarantee performance levels for new or existing Software features for a Hardware Product which is EOPS.



- Sonus cannot guarantee Service levels on Software running on EOSL hardware even if software is certified – specific service levels will be determined during annual maintenance contract renewal.
- At Sonus' discretion, certain EOSL Hardware Products may be eligible to remain under a customer maintenance agreement past the Product EOSL date under limited TAC Only Support as documented by Sonus.
- At Sonus' discretion, EOSL Hardware may be re-certified and approved as acceptable spare part.

## 8.0 DEFINITIONS

| Term  | Definition  |
|---|---|
| <b>Customer</b>                                     | For purposes of this support policy, Customer may mean the direct purchaser from Sonus, or as applicable, the end user of a Channel Partner   |
| <b>End of Product Sale</b>                          | Date Sonus discontinues a Product which is the last date that the Product is manufactured ( <i>See Manufacturing Discontinuation (MD) below</i> )   |
| <b>End of Product Sale Notification (EOPS) Date</b> | Date the Sonus EOPS notification bulletin is issued to announce the End of Product Sale for a Product. This Sonus bulletin indicates the scheduled dates for remaining EOL milestones and provides to Customers additional information and implications of the announced EOPS for a Product |
| <b>End of Support Life (EOSL)</b>                   | Date that Sonus Customer Service discontinues Support Services for a Product  |
| <b>Explicitly Certified</b>                         | Sonus Release Notes associated with the applicable Software which explicitly identifies the EOPS Hardware as a valid platform to execute the applicable Software  |
| <b>General Availability (GA)</b>                    | Date the Hardware or Software Product is Generally Available for Customer in production networks. A Sonus Product bulletin is issued announcing availability.   |
| <b>Hardware</b>                                     | The computer equipment and related accessories or parts   |
| <b>Last Order Date (LOD)</b>                        | Last date an order may be placed for a Product  |
| <b>Sustaining Release</b>                           | An incremental release of Software that provides maintenance fixes, bug fixes and patches. Maintenance Releases are designated by Sonus as a change in the “z” digit(s) in the software version number [x.y.(z)]  |
| <b>Manufacturing Discontinuation (MD)</b>           | Last date Sonus Manufacturing will manufacture a Product. After this date, Sonus Manufacturing no longer builds, packages, or maintains stocking levels of the Product.   |
| <b>Major Release</b>                                | A platform release of Software that provides additional software features and/or functions. Major Releases are designated by Sonus as a change in the “x” digit(s) of the software version number [(x).y.z]   |
| <b>Minor Release</b>                                | An incremental release of Software that may provide additional software features and/or maintenance fixes, bug fixes and patches. Minor releases are designated by Sonus as a change in the “y” digit(s) of the software version number [x.(y).z]   |



|                                  |   |
|----------------------------------|---|
| <b>"Head" of a Release Train</b> | Implies latest Minor/ Sustaining SW releases for a given Major SW Release.<br>For instance: For Major Release SW 15.0 train, last SW Release was 15.2.1 and SW Release 15.2.2 is planned to be GA'ed soon, then SW Release 15.2.2 is "Head" of Release Train 15.0.  |
| <b>Platform</b>                  | <b>Hardware Platform</b> – can be either a standalone Hardware solution delivering feature functionality or a chassis solution delivering feature functionality or a chassis based solution with interchangeable modules<br><br><b>Software Platform</b> – Can be either a major Software release delivering new feature functionality or sold as Software solution |
| <b>Release Naming Convention</b> | For the purposes of Software entitlement, the typical release naming convention for Sonus releases is x.y.z where x=Major release, y=Minor release and z=Maintenance release  |
| <b>Software</b>                  | The object code instructions for a Software Product   |