



**Telemetry-enabled Customer Support  
using the Cray System Snapshot  
Analyzer (SSA)**

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# Overview

- **Purpose**

- To present the customer benefits for use of the Cray System Snapshot Analyzer (SSA)

- **Background**

- **Customer Benefit**

- The Cray System Snapshot Analyzer enables faster issue response, less user overhead and more personalized customer support, while also delivering improved uptime management

- **Select Metrics**

- **2017 Roadmap**

- **Summary**

- **Q&A**

# BACKGROUND



# Background

- **What is the Cray System Snapshot Analyzer (SSA)?**
  - Cray supported product, backed by 24x7 support team
  - Common client application on supported Cray Platforms
  - Collects and locally caches information from a customer system (both on-demand and dynamically/on-schedule)
  - Securely uploads (one-way) data to Cray
  - Performs analyses against uploaded data
  - Integrates with Cray support case management tools
  - Back-end data and tools currently only available to Cray
    - Actively investigating customer interfaces to data



# Background (continued)

## ● Brief History

- Started internally at Cray in 2012, customer early access release in 2014, initial generally available (GA) release in June 2015
- Introduced at Cray User Group Conference in 2015
- Currently Supports
  - Cray® XE6™, XK6™, XK7™, XC30™ and XC40™ systems running the SMW 7.2- and CLE 5.2- based software environments
  - Cray® Sonexion 900™, 1600™, 2000™ and 3000™ systems running the 1.2, 1.3, 1.4, 1.5, 2.0 and 2.1 software environments
- There have been nine client releases
  - most recently the 1.4.0 release in March 2017
  - clients normally released on quarterly basis (Field Notice (FN) 6122)



# Background (continued)

## ● Getting Started with SSA

- See CrayPort Knowledge Article 4546, “*Getting Started with the Cray System Snapshot Analyzer (SSA)*” for step-by-step guide
- All software and documentation available on CrayPort or Cray Publications websites
- SSA upload account activation managed through CrayPort
- Installation and configuration are simple, can be performed on running system
- SSA is currently free of charge to customers with a Cray service contract and an SSA supported platform
- See associated CUG paper for additional references, including SSA whitepaper

# CUSTOMER BENEFIT

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# Customer Benefit

- **Customers have to answer fewer questions (provide less information) when working with Cray customer service**
- **Historical product data is readily available to Cray customer service**
- **Customers have an ‘easy way’ to report product triage information**
- **All products qualified for SSA have at least a basic set of health checks available**



# Customer Benefit: Product Inventory

- **Customers have to answer fewer questions (provide less information) when working with Cray customer service**
  - Saves time when working support concern(s)
  - Saves time when Cray would otherwise have to survey customers
- **Historical product data is readily available to Cray customer service**
  - Easy to 'see' what system looked like, historically
  - Saves time, allows use of change data to aid in causal analysis

# Customer Benefit: Product Triage

- **Customers have an ‘easy way’ to report product triage information**
  - Simplifies routine data collection and upload tasks
  - Single command to collect and upload information to Cray
  - Data is easily referenceable (e.g., by date/time, product, case/bug)
  - If customer supplies case ID, triage data is automatically associated with their service case

# Customer Benefit: Product Triage

```
# ssacli --runset triage --channel triage --ref 'sfdc:123456'
```

<b>Case Number</b>	123456
<b>Subject:</b>	Sonexion Software System Update Requested
<b>New Comment</b>	<p>Created By: System Snapshot Analyzer (SSA) (03/10/2017 2:25 PM) A new triage snapshot from SSA has been uploaded and associated with this case:</p> <p>Snapshot ID: 18416 Product Serial: 10000000</p>
<b>Description:</b>	<p>Our customer has tentatively planned an outage for the first or second week in March to install the latest SU on this system. There will be other maintenance done at the same time on other systems. Onsite or remote support will not be required.</p>

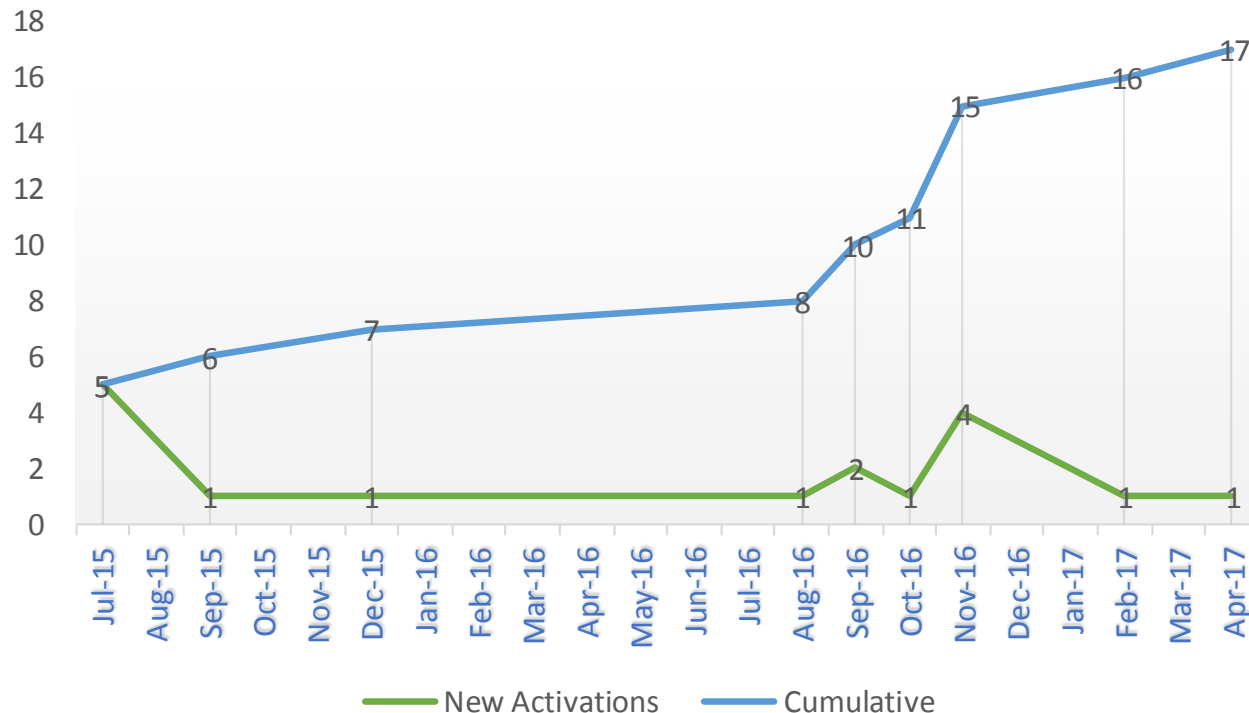
# Customer Benefit: Product Health

- **All products qualified for SSA have at least a basic set of health checks available**
  - Leverages standard application programming interface (API) in SSA, producing standard, versioned, structured *stateful* health checks
  - Health data is uploaded when change is detected
  - SSA back-end analyzes and produces discrete health *events* and maintains event history
  - Cray employees can subscribe to SSA health notifications for particular customers, serial numbers or platform type
    - Subscribers can generate a support case directly from any failing health event included in notifications

# SELECT METRICS

## UPDATED MAY 5, 2017

# Metric: Customer SSA Activations

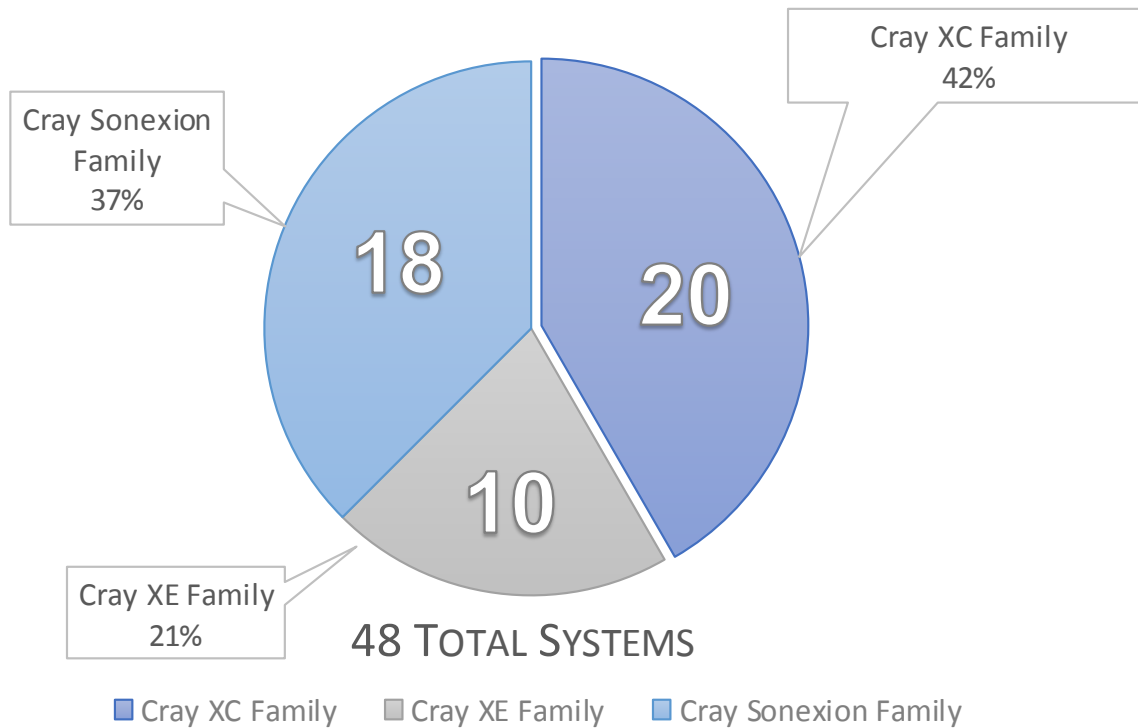


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# Metric: Customer Systems Reporting



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# 2017 SSA ROADMAP

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# 2017 SSA Roadmap

- **Continued incremental bug fixes and features on the Cray® Sonexion™, XC™ and XE6™ (including XK) products**
- **Initial support for SMW 8.0 and CLE 6.0 on Cray XC™ product**
- **Initial support for the Cray® Urika GX™ product**
- **Initial integration of SSA inventory and status information into Cray customer support asset tracking systems**
- **Event streaming/processing foundation**

# Summary

- **Customer Benefit**
  - The Cray System Snapshot Analyzer enables faster issue response, less user overhead and more personalized customer support, while also delivering improved uptime management
- **SSA customer adoption is growing**
- **SSA is available free of charge to customers with an active service contract**

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# Q&A

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