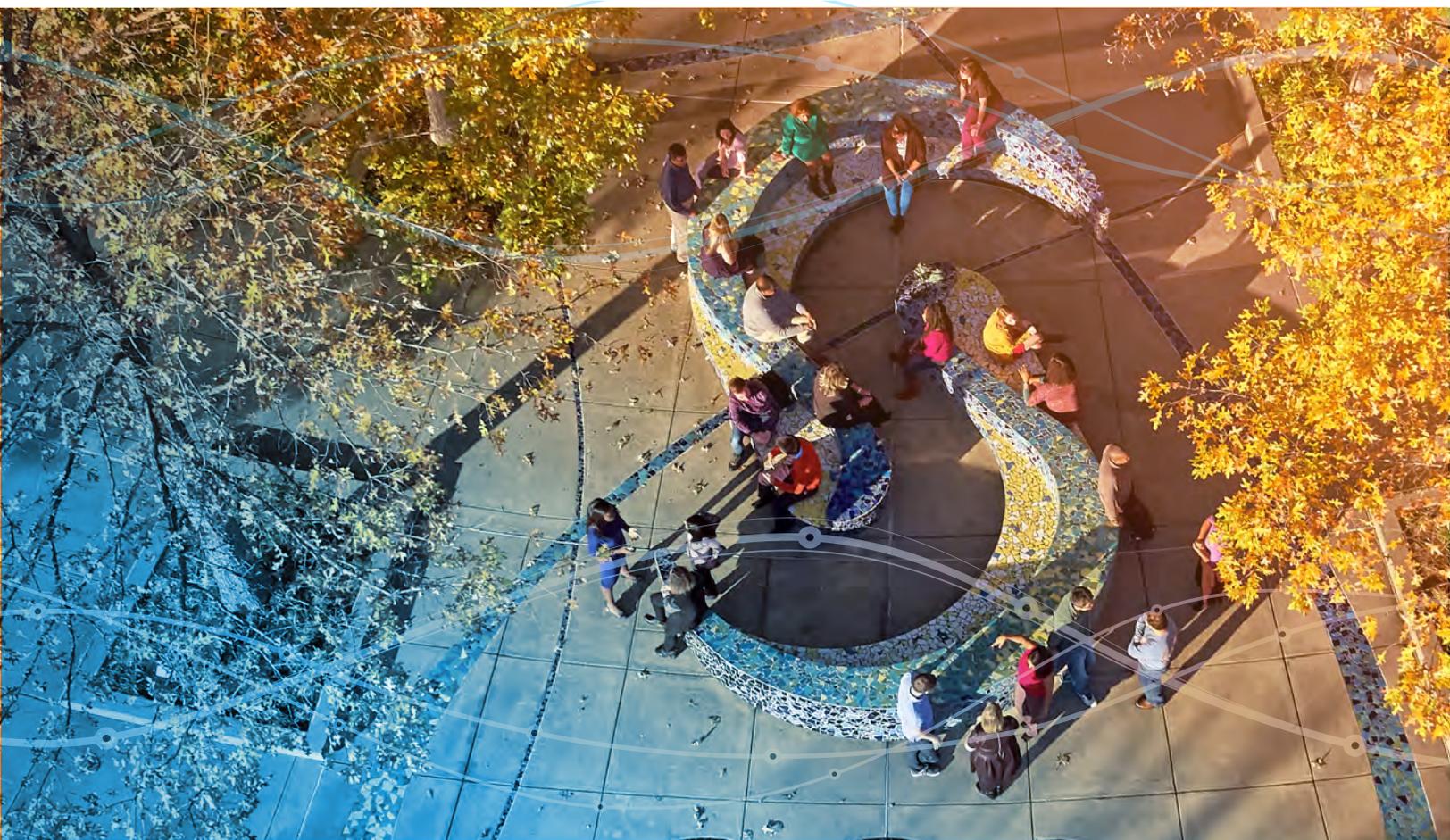


The Quality Imperative: SAS Institute's Commitment to Quality

A corporate statement of SAS' commitment to product quality,
service quality, and customer satisfaction



Maintenance and Support

Quality in SAS® Technical Support

SAS Technical Support's mission is to "help our customers make the best use of our software products through effective and responsive support, active advocacy, and a broad and flexible range of self-help resources." (Annette Harris - Senior Vice President, Technical Support)

This section explains how SAS Technical Support accomplishes that mission. For the most current detailed information about SAS Technical Support services and policies, see "SAS Technical Support Services and Policies," available at <https://support.sas.com/en/technical-support/services-policies.html>.

SAS provides customers with 24-hour, follow-the-sun technical support via telephone, email, chat, and online support as part of the annual licensing fee. Customers with questions and problems that are related to SAS software can contact Technical Support as follows:

- by telephone (9:00 a.m. – 8:00 p.m. EST)
- by chat (9:00 a.m. – 6:00 p.m. EST)
- from the SAS Customer Support site, available at <https://support.sas.com/en/support-home.html> (available 24 hours a day, 7 days a week, 365 days a year)
- by email (available 24 hours a day, 7 days a week, 365 days a year)

Problems that cannot be resolved immediately are routed to subject-matter experts, who prioritize problems based on severity. SAS Technical Support strives to return initial calls within a two-hour period for severe problems, and up to a maximum of 24 hours for less severe problems.

Customers experiencing critical software problems should contact SAS Technical Support by phone. The average telephone hold time is fewer than 30 seconds, and approximately 60% of questions are resolved within 24 hours. For critical problems that occur outside of the business hours listed above, customers are directed to one of SAS' worldwide support centers in North America, Europe, or Asia/Pacific. Leveraging global resources, SAS can provide customers with 24-hour, follow-the-sun support.

SAS Technical Support takes pride in providing fast and accurate responses to customer-reported questions and problems. However, a key goal of SAS Technical Support is to empower customers with the tools that they need to find answers and resolve problems on their own. Therefore, a full range of electronic support services and a variety of self-help resources are available on the SAS Customer Support (<http://support.sas.com/>). From this website, customers can do the following:

- Contact SAS Technical Support for help at <https://support.sas.com/en/technical-support/contact-sas.html>.
- Search the knowledge base at <https://support.sas.com/en/knowledge-base.html> which contains SAS Notes, sample programs, and user documentation.

- View SAS Viya administrator resources at <https://support.sas.com/en/documentation/install-center/viya/administration.html> and SAS 9.4 and earlier administrator resources at <https://support.sas.com/en/documentation/install-center/94/intelligence-platform.html>. Administrator resources include downloads, hot fixes, maintenance updates, security bulletins, and system requirements.
- Suggest ideas for software enhancements at https://communities.sas.com/t5/SASware-Ballot-Ideas/idb-p/sas_ideas.
- Obtain documentation about technical support services at <https://support.sas.com/en/technical-support.html>, including information about support levels (Standard and Premium) and support services and policies.
- Interact with other SAS customers through our SAS Support Communities at <https://communities.sas.com/>.
- Find SAS Training information at <http://support.sas.com/training/>, including classroom training (on-site, web, and mentor training), free tutorials, certification programs, e-learning, and the SAS Learning Subscription.

All these details and more, including the most up-to-date services and content, can be accessed on the SAS Customer Support website at <https://support.sas.com/en/support-home.html>.

Software Fixes in the Field

Hot Fixes and Maintenance Releases

Overview

SAS releases regular updates to software products in the form of hot fixes, maintenance releases, and product releases. Hot fixes are SAS' timely response to customer-reported problems. They are also a way to deliver occasional security-related updates that can affect any software product.

SAS Technical Support acts as the central point of contact for customer-reported problems regarding production products. When a customer reports a problem that requires a hot fix, Technical Support enters the information about the issue into the problem reporting system, noting that a hot fix is requested. R&D and Technical Support work together to review the requested hot fixes and determine which fixes will be made. Technical Support then authorizes the fix, and it enters the hot fix process. Once R&D provides the fix, it is tested to ensure that the issues are resolved. In addition, regression testing that is appropriate to the scope of the fix is performed. If the problem solution is surfaced on the web and the fix includes UI changes, the R&D groups also evaluate the need to rerun vulnerability testing.

Fixes are cumulative. If a new fix requires a change to content that is included in an existing fix, then the existing fix either is replaced or is updated with a newer fix that contains the original fix plus any new fixes.

While SAS strives to provide fixes for all serious problems, there might be cases where it is impractical or impossible to generate a fix. For example, a fix might not be possible because of compatibility issues or because of the potential for the introduction of unwanted side effects.

SAS® Viya®

For SAS Viya, software updates replace some or all the existing deployed software with the latest releases of that software. Updates are performed with the same commands that are used to install SAS Viya, using the same software order and the same playbook. More details about updating SAS Viya software are available in the "Managing Your Software" section of the SAS Viya deployment guide for specific SAS Viya releases and operating systems at <https://support.sas.com/en/documentation/install-center/viya/deployment-guides.html>. Updates are posted on the Technical Support Hot Fixes web page at <http://ftp.sas.com/techsup/download/hotfix/hotfix.html>.

SAS® 9.4

For SAS 9.4, available hot fixes are automatically included when downloading an order from the SAS Software Depot. If there is a significant time lapse between order download and deployment, additional hot fixes may have become available. All customers have access to the download pages and can download individual fixes from the SAS Technical Support Hot Fixes web page, available at <http://ftp.sas.com/techsup/download/hotfix/hotfix.html>. For more hot fix information, see the "Applying Hot Fixes" section of the SAS® 9.4 Guide to Software Updates and Product Changes at https://go.documentation.sas.com/?cdId=pgmsascdc&cdcVersion=9.4_3.5&docsetId=whatsdiff&docsetTarget=p1vm9m5b9znanwn1vsr3bi4f1iog.htm&locale=en.

In addition, SAS uses maintenance releases to update and support SAS 9.4. Maintenance releases include fixes and enhancements, documentation updates, and localizations. Maintenance details are posted to the SAS Customer Support site at <https://support.sas.com/en/support-home.html> when they are available. Information about the current maintenance release is available on the Maintenance Release Announcement web page at <https://support.sas.com/software/maintenance/>.

Alerting Customers

To stay informed about new hot fixes and to receive notifications when they are available, visit the Communities: SAS Hot Fix Announcements page at <http://communities.sas.com/t5/SAS-Hot-Fix-Announcements/bg-p/hf>.

To sign up for SAS Technical Support News and to request that operational announcements be delivered via email, visit SAS Technical Support at <https://support.sas.com/en/technical-support.html> and look for the following sign-up area:

SAS Technical Support News

Get news and operational announcements delivered directly to your inbox.
Subscribe by entering your email address below.

Email*

SAS Technical Support News and operational announcements can be obtained by:

- Logging on to a SAS profile.
- Clicking Edit Profile.
- In the Subscriptions section, clicking Technical Support Updates - News and Operational Announcements.

SAS documents Alert Priority issues, as well as problems that are not alert status, in the form of SAS Notes. Customers can search for Alert Priority issues in the Samples & SAS Notes database at https://support.sas.com/en/search.html?q=%3A*&fq=siteArea%3A%22Samples%20%26%20SAS%20Notes%22.

SAS lists product change notifications on the Product Advisory Notices from the SAS website at <http://support.sas.com/techsup/pcn/index.html>.

Migrating to New Releases

For information about moving from one release of SAS to another or when changing operating systems, see the guidance provided on the following websites:

- Migration: <http://support.sas.com/rnd/migration/>
- Migration validation: <http://support.sas.com/rnd/migration/planning/validation/index.html>

The MIGRATE procedure, which has validation macros associated with it, can assist with migrating data and catalogs. Migrating code is more involved. Therefore, SAS recommends that customers develop a migration plan that encompasses a sampling strategy based on the total number of programs that need to be migrated and on the acceptance level. The ANSI/ASQC Z1.4, ISO 2859 standard (Military Standard 105E) can help customers determine the appropriate sample size.

Operations

SAS provides technical support in accordance with the Technical Support policies. However, if a customer chooses not to install the most current release of the software, then the level of support that is available diminishes over time.

For more information about support, hot fixes, and source code archiving, see the following resources:

- For documentation on support services and policies for current and prior releases of software, see the "SAS Technical Support Services and Policies" web page at <https://support.sas.com/en/technical-support/services-policies.html>.
- For more on source code archiving, see the "Business Continuity Management" white paper at http://www.sas.com/content/dam/SAS/en_us/doc/other1/continuity-of-business.pdf.

Retirement

The R&D division directors, Marketing, and Technical Support management work together to determine when a product or host should be retired. Any remaining customers are notified of product status. To learn more about product support levels, see the following resources:

- The "Support Levels by Product" page: <https://support.sas.com/en/technical-support/support-levels.html>
- For SAS Viya 2020.1 and later, complete the steps in the "View the Update Checker Report" section in the SAS® Viya® Operations: Software guide at https://go.documentation.sas.com/?cdcId=itopscdc&cdcVersion=v_001LTS&docsetId=k8sag&docsetTarget=p1it185kd37v25n1aoybu799tpk4.htm&locale=en
- The table in the section "Support Levels for SAS® 9.4, SAS® Viya® 3.5, and Earlier Releases by Release Number" at <https://support.sas.com/en/technical-support/services-policies.html#releases>

Release Information

The version of this paper is January 2022.

Unless otherwise indicated, this document relates only to SAS 9.4, SAS Viya, and the products that are available with SAS 9.4 and SAS Viya. It also relates to services from the date of this paper forward. Quality processes are continually evolving. Therefore, SAS reserves the right to modify the processes described in this document at any time. If you are using SAS 9.4 and SAS Viya and have questions about processes in those releases, send email to qualitypaper@sas.com.

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