

A group of people in a meeting, with a man in a white shirt pointing at a screen. The background is blurred, showing other people and a screen.

Tivoli® Information Management for z/OS

General Information
Version 7.1

Tivoli® Information Management for z/OS

A process automation tool that delivers Systems Management Services, including Incident, Problem, Change and Asset management applications, for your end-to-end managed environment, offering:

- Common repository with multi-platform access
- Fully customizable distributed GUI clients
- Capability for globally dispersed user communities with full regional date/time support
- Comprehensive monitors for notification and escalation messaging via pagers, E-mail, cell phones, and more
- Solution Knowledge Base with full textual search capabilities to provide quick problem resolution
- Ease of modification and customization through simple record updates
- Automatic backups and recovery, 24 hours a day, 7 days a week

Tivoli Information Management for z/OS gives you a way to implement, enforce, and automate your enterprise.

Product Overview

“I need a way to manage all the help desk calls and changes our information systems organization gets every day...with a solution that won't slow us down every time we need to implement a new business policy.” Sound familiar?

Unlike other systems management products, Tivoli Information Management for z/OS gives you a way to implement, enforce, and automate administrative processes and policies in your enterprise. Tivoli Information Management for z/OS is a software product that consists of an integrated set of tools and services for customizing and automating your:

- Help desk or call center
- Problem management
- Change management
- Configuration management

As a management solution offering, it is designed to help you manage your enterprise's data by providing a centralized repository capable of storing up to 400 gigabytes of data per database on an OS/390® platform.

Databases can reside on one or more OS/390 systems and can be shared in a parallel sysplex®. Sysplex support enables you to maximize performance while minimizing cost, and gives you the flexibility to configure your system environment as your needs change.

Tivoli Information Management for z/OS creates an interactive structure which enables you to retrieve, integrate, and manage the information that is valuable to the daily operation of your enterprise.

It enables you to control your enterprise with less effort and more accuracy than ever before. You can record information on problems and changes as they occur, using formats and data tailored to your company's business needs and processes. You can record problems and changes using the World Wide Web or a graphical user interface on your workstation.

Tivoli Information Management for z/OS gives you facilities to help you:

- Manage your data processing problems and changes
- Integrate your problem and change management processes
- Maintain your company's inventory and configuration in an orderly way
- Integrate with other enterprise systems or service management products such as Tivoli Business Systems Manager for OS/390, Tivoli Decision Support, Tivoli Enterprise Console®, Tivoli Inventory, Tivoli NetView® for z/OS, Tivoli Operations Planning and Control, and Tivoli Software Distribution.
- Maintain an organized framework so you can do more than react to day-to-day problems — you can plan ahead.

A powerful online search capability guides you step-by-step in retrieving and displaying data processing information. And your entire company can benefit from the variety of custom-tailored reports that can be generated from this information.

Tivoli Information Management for z/OS can help information technology departments and end users achieve these benefits:

- Increased system availability because of faster problem resolution, which results in less computer down time
- Higher productivity as highly skilled programmers and technicians spend less time on maintenance and recovery
- Cost savings from improved operation, faster resolution of problems, and efficient monitoring of your system's performance

People in your organization who can use Tivoli Information Management for z/OS are:

- Help desk agents
- Systems administrators
- Hardware and software support personnel
- Systems management developers
- Managers and supervisors

Any of these people can access data and data management services stored in Tivoli Information Management for z/OS from the World Wide Web or from remote client environments, such as workstations using OS/2®, Microsoft® Windows NT®, HP-UX, Sun Solaris, and AIX®. You can choose from a variety of user interfaces to view and use the data. From host-based panels to modern graphical user interfaces to your favorite Web browsers, you choose what is best based on your people's skills, experience, or preferences. And your business can use any combination of these interfaces.

What Can You Do?

You can use Tivoli Information Management for z/OS through 3270 host panels, through a web browser, or through the updated GUI Desktop interface to perform application functions. The power of the product allows you to build a suite of integrated management applications to automate incident, problem,

request, asset, and service level management tasks, as well any other tasks you wish to include in the suite.

Your applications can work in support of each other, enabling users to perform tasks with relative ease. For example, help desk analysts can record problems associated with recent changes made to the IT environment, get information about assets that need upgrading, and find out which users have outstanding requests for assistance. Administrators can perform all these tasks as well, and can also create contract records to define the applications or assets that require availability per service level agreements with your customers.

How Do You Get Started?

To begin implementing your company's systems management process, you can start by using the sample applications that come with Tivoli Information Management for z/OS at no additional cost. Sample applications include:

- Problem, Change, and Configuration Management
- Java-based Desktop application

Problem, Change, and Configuration Management

A model of a typical systems management system is available with Tivoli Information Management for z/OS. Problem, change, and configuration management tasks can be performed using task-oriented panels. Later, as you define and fine-tune your processes, you can tailor your panels and automate your processes by using more advanced Tivoli Information Management for z/OS functions.

For each systems management task, Tivoli Information Management for z/OS guides you step-by-step through a logical sequence of panels. All you do is fill in the blanks. Tivoli Information Management for z/OS prompts you to select from the menus, issue commands, or enter the requested data. Input can be validated to ensure that it is complete and accurate. The system automatically notifies you of data entry errors and assists you in entering the correct responses. Data can be stored as entered by users and displayed in mixed case.

For increased productivity, you can predefine a sequence of responses for routine tasks and store the predefined sequence to use each time the task is repeated. These stored sequences increase productivity by reducing both errors and the number of keystrokes needed. They also simplify training and ensure that tasks are done in a consistent manner. This is particularly useful for help desk agents in immediately solving types of problems that have been previously reported.

What Else Can You Do?

While Tivoli Information Management for z/OS is designed to manage problem, change, and configuration data, it certainly isn't limited to that. You can manage any kind of data you choose and automate nearly any process you have. You can use Tivoli Information Management for z/OS for many different kinds of applications because you can modify the end user interface, business logic, and data definitions. And the best part is that your customizations are portable from release to release as you upgrade. Here are just a few examples of other types of applications:

- Customer information
- Inventory control
- Project management
- Requirements management
- Service level agreements

The fact that Tivoli Information Management for z/OS streamlines and improves the accuracy of data entry is only part of the story. The real benefits lie in your ability to easily retrieve the data you need from online panels, printed reports, or through graphical user interfaces. Tivoli Information Management for z/OS offers other facilities related to information retrieval, such as access control, automation, the ability to tailor the Tivoli Information Management for z/OS tools, and interfaces that enable you to run your own programs.

How Do You Use It?

You can view, edit, and interact with your system's data in different ways. Your end users can use:

- Their World Wide Web browser
- A graphical user interface (GUI) on their workstation
- An interface from a remote application
- Host systems panels enhanced with action bars and pull-down menus

Depending upon your system and user needs, you may need to use several different interfaces for your business. Your end users may use a Web browser or a GUI from a workstation, your help desk may use the Java-based Information Management for z/OS Desktop, and your system administrator may use enhanced host panels. With Tivoli Information Management for z/OS, you can tailor views to your specific needs.

Using Web Applications

Using the World Wide Web, you not only use your favorite browser for searching data and using Tivoli Information Management for z/OS, but you can also write help desk applications using HTML tags. You can design a graphical view of your system or network configuration to visually pinpoint problem areas as they occur. Each item in your configuration could have a unique universal resource locator (URL) depicting configuration information, recent change information, and previously reported problems and fixes. Help desk agents could click on graphics and view all pertinent information while a user is on the phone reporting a problem. You could also monitor your service level agreements. Since auditability is provided at the user level, you can identify who is performing transactions with the database.

Tivoli Information Management for z/OS Web connectors are provided for the OS/390 UNIX® and MVS™ platforms. To help you write client applications that connect to the Tivoli Information Management for z/OS database through the World Wide Web, Java programming support and sample programs (including JavaScripts, HTML, and REXX programs) are provided. Applets enable you to easily validate data entered by users before the data is submitted to Tivoli Information Management for z/OS. You can use your existing network resources and transport to provide and enhance your help desk function. Imagine your options! You can record telephone calls between users and help desk agents that can be played back through a browser...or train remote users



Enter a new world of reporting with Tivoli Service Desk for OS/390 Web connectors.

through on-demand video clips. Users can even search the database for software upgrades or fixes and point and click on a hyperlink to automatically download updates.

Using the Tivoli Information Management for z/OS Desktop

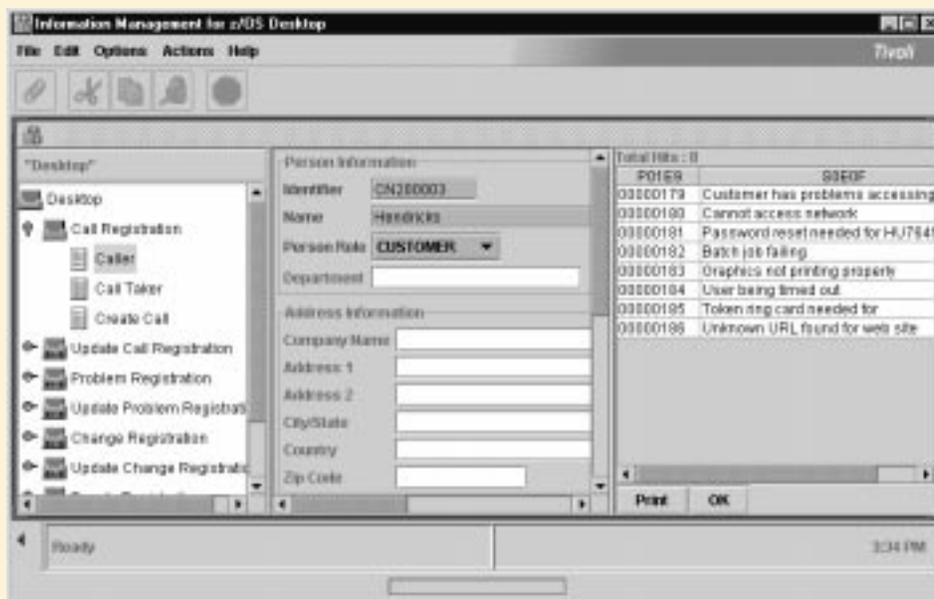
The Tivoli Information Management for z/OS Desktop is a tailorable starter application for use in the help desk environment. You can also use it to add, update, delete, browse, or search data stored in the host database.

The Tivoli Information Management for z/OS Desktop runs on a Java™ platform and enables users to perform tasks common to many help desk environments, such as entering calls, problem reports, or change requests; assigning or closing problems; and searching for information related to previously reported problems. A sample Desktop application is provided which you can

customize to reflect the unique processes and tasks performed within your enterprise.

Advantages of the Tivoli Information Management for z/OS Desktop include:

- Simplicity of use and upkeep. Users do not need to be familiar with host Tivoli Information Management for z/OS commands or host panel navigation, nor do administrators require Java programming skills or highly specialized skills in host panel modification.
- Data validation. Users can interact with the host through a graphical user interface and data entries are completely validated at the workstation based on validation rules in Tivoli Information Management for z/OS.



Use the sample Desktop, or design your own application.

- Flexibility. Administrators can easily adjust the design of the application through data model records on the host and an easy-to-use workstation toolkit. Once updates are made to the design, application updates are made available to users at their next logon.

With the Tivoli Information Management for z/OS Desktop, users have the benefits of a GUI interface, while your administrators have the convenience and flexibility of host-centric application design.

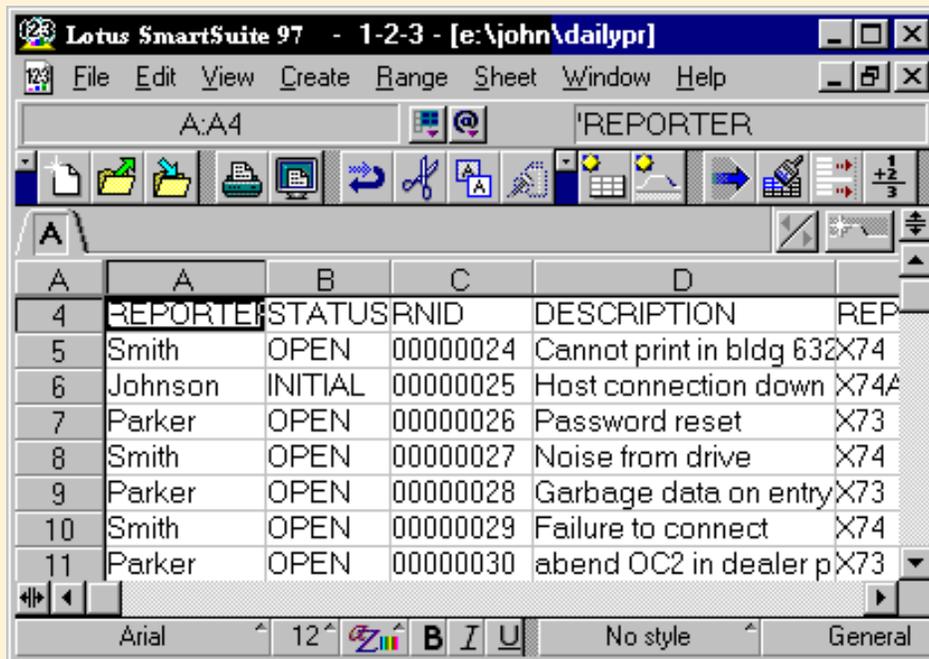
The GUI application can be customized to easily fit your business needs through enhanced data records. These records, which reside in the Tivoli Information Management for z/OS host database, provide a central location for administrators to make changes

or updates to the application design. Data model records simplify user application updates when a new requirement or process change arises. You can add or delete data fields from GUI panels by simply altering the definition of the data model records on the host.

Using a Remote Application

As a final interface option, you may want to interact with Tivoli Information Management for z/OS through a specific application, such as a report generation application running on a remote client. Your user interface can be provided by the remote application.

An Open Database Connectivity (ODBC) driver is available to enable users to retrieve data from the Tivoli Information Management for z/OS host database from any ODBC-enabled



The ODBC driver lets you enter search inquiries and work with the data in spreadsheet and other applications on your workstation.

report tool or application running Windows NT workstation. You can use ODBC-enabled workstation applications, such as database and spreadsheet applications, to retrieve data for reporting purposes.

You can also have immediate access to key enterprise information stored in Tivoli Information Management for z/OS through Tivoli Decision Support. Ready-to-use views and reports are provided so that you can identify key problem management and change management data, and publish the data for others in your enterprise to use.

Information viewed with Tivoli Decision Support can be published on a Web site, or as an information ticker that streams across the user's desktop if your company uses broadcast tools. Users can then check the information before calling their internal help desk to report a problem.

Searching the Database

You tell Tivoli Information Management for z/OS what kind of information you want and let it do the searching for you. The powerful search capabilities of Tivoli Information Management for z/OS provide flexible, online inquiry methods. You can easily retrieve problem, change, or configuration records for online browsing or printed reports. Help desk agents can quickly solve problems by searching for stored problem resolutions and then issuing the required fixes or changes.

You can conduct a search in several ways:

- Through a World Wide Web browser, you can search Tivoli Information Management for z/OS data through a graphical user interface, perform prefix or keyword searches, and browse the results from your workstation.
- By logging on directly to Tivoli Information Management for z/OS, you can perform searches different ways, depending on your job and level of expertise:
 - A prompted search guides you step by step in creating the required search argument. Follow the prompts to arrive at the desired information.
 - A prefix or keyword search speeds inquiries by eliminating the step-by-step prompting. Experienced users find this quick and efficient because they can enter the search argument in a single interaction with the program.
 - A quick search guides you with fill-in-the-blank prompts through inquiry panels that resemble data entry panels. As you enter the values into the appropriate fields, Tivoli Information Management for z/OS builds the argument for you and performs the search.

- Through the Tivoli Information Management for z/OS Desktop, you can search and retrieve information on previously reported problems and use that information in new problem records.
- By entering search inquiries through the ODBC driver, you can find data and retrieve it for use with common spreadsheet and database applications on your workstation.

You can also propagate your Tivoli Information Management for z/OS production data to other Tivoli Information Management for z/OS databases and to DB2®. If you propagate to DB2, you can then issue Structured Query Language (SQL) queries against the data.

As an option, you can exploit the power of OS/390 Text Search to search the freeform text associated with the records in your database. Users can enter text search arguments to find data in detailed description or resolution text and receive a list of matching records. Boolean operators, fuzzy searches, parenthetical searches, and wildcards are supported. Freeform text searches can be done through a host panel or a Desktop application. You could also search text through a client API or Web connector interface.

Through the interface to OS/390 Text Search, you can build a knowledge base of data from existing or new records that your help desk analysts can use to operate more effectively. Resolutions to commonly reported problems can be marked as “solutions” and indexed for searching. As new problems come in, help

desk analysts can search for and apply solutions from the problems that have already been reported and corrected. You can also set up a knowledge base from other types of records and extend information retrieval solutions to other areas of your enterprise to help solve your data mining needs.

Reporting

Out of the box, you have real-time access to all your data. To complement this access, Tivoli Information Management for z/OS offers hundreds of standard reports provided with the product, addressing a wide variety of operational and management reporting needs.

Depending upon your needs, you can create:

- General reports that provide detailed or summary information about all types of database records
- Application-specific reports that focus on problems, changes, and components that are of particular significance to the installation
- Ad hoc reports created through an ODBC-enabled application

You can create reports in a number of ways:

- Through online commands and batch jobs
- By creating Java applets to display statistical data in graphical format
- Through an ODBC-enabled application on your workstation, so that you can retrieve and browse data using familiar business applications on your workstation

In addition, you can incorporate an enhanced “best practices” reporting suite, available with Tivoli Decision Support.

Tivoli Decision Support

You can translate pieces of data into meaningful knowledge about your operations, end uses, and relationships with them. Tivoli Decision Support goes beyond traditional reporting tools and static reports by providing value-added functions that make data analysis more effective. You can take advantage of the predefined questions and views that allow you explore data different ways to reveal the hidden relationships among the data. Data can be shared with other people in the enterprise through various mechanisms, including printing, file extractions or delivery to your company intranet.

Automating Tasks

Automation is not only the key to increased productivity; it also ensures accuracy and improves the quality of your management system. Certain tasks are always repeated.

Others tasks are performed each time a specific problem occurs. Being able to automate repeated tasks saves you time and money. Without additional cost, Tivoli Information Management for z/OS provides several automation functions:

- Problem management automation with Tivoli NetView for zOS
- Workload management and job scheduling automation
- Storage of predefined task sequences

Collecting Network Alerts and Messages

Tivoli Information Management for z/OS extends problem control and management to remote parts of your network. You can dynamically track problems in your distributed network, consolidate distributed and host-oriented problem records in one database, and automate tasks.



Explore your data in new ways with Tivoli Decision Support.

A NetView automation feature comes with Tivoli Information Management for z/OS. It takes data such as NetView alerts and messages and then builds and runs transactions or process steps automatically. Once a NetView alert is received, a series of tasks can be automatically completed. You can specify thresholds to begin tasks only after a certain number of alerts are received. You can also specify information to filter alerts so that you need not respond to every message or alert but rather only to those that are most crucial.

The tasks that you can automate include searching and updating the database, creating problem records, sending messages, issuing a change, or processing a transaction.

Additionally, you can take advantage of built-in automation functions with other Tivoli host products. For example, Tivoli Business Systems Manager for OS/390 can automatically open problem reports in the Tivoli Information Management for z/OS database whenever problems are detected in the systems it manages and monitors. Tivoli Information Management for z/OS also integrates with Tivoli OPC, which plans, controls, and automates MVS batch production workloads.

Sending E-mail

Support for sending e-mail messages is also provided. Sample REXX EXECs and model message records are provided which you can customize to send e-mail messages to members of your support staff to notify them

of situations. For example, you can inform people when problems have been assigned to them, or alert someone when an upcoming change to a production application will cause a service level to be missed. E-mail can be sent through simple mail transfer protocol servers residing in a host or distributed environment.

Integrating with Tivoli Enterprise™ Software

Besides automating problem management with Tivoli NetView for z/OS, Tivoli Information Management for z/OS integrates with other Tivoli products to enhance the systems management of your enterprise and the control of Tivoli Information Management for z/OS.

- Tivoli Business Systems Manager for OS/390

You can open problem reports for an S/390-managed resource that has received an alert. The interface also gives you the ability to update, display, and search problem reports so that you can view all open problem reports against a managed resource.

- Tivoli Software Distribution

You can initiate the distribution of software when change requests are approved in Tivoli Information Management for z/OS. When a change request is approved, you can generate a Tivoli Enterprise Console event to trigger the distribution of workstation software packages or upgrades to target machines in a Tivoli management software environment. The target machines can be on

any workstation platform supported by the Tivoli Software Distribution product, such as UNIX, AIX, Windows NT, or OS/2. In addition, you can use Tivoli Software Distribution to remotely install the Tivoli Information Management for z/OS client program interfaces on various target platforms across your enterprise. You can install and update applications in a coordinated and consistent manner for timely application deployment.

- Tivoli Enterprise Console

You can store and retrieve data in Tivoli Information Management for z/OS that can be used to generate Tivoli Enterprise Console events for software distribution or other purposes. Additionally, you can create, update, and delete Tivoli Information Management for z/OS problem records based on events received by the Tivoli Enterprise Console. The creation, update, or deletion of problem records can be initiated from the Tivoli Enterprise Console or automatically initiated through the use of Tivoli Enterprise Console rules and tasks.

- Tivoli Inventory

If you use Tivoli Inventory to scan target machines to collect current information on the hardware and software installed in your enterprise, you can extract this data and send it to the Tivoli Information Management for z/OS database. The data can be displayed or queried, or used to support the Tivoli Information Management for z/OS applications.

- Tivoli OPC

Problems in processing the MVS batch production workload can be detected by Tivoli OPC (Operations Planning and Control) and forwarded to Tivoli Information Management for z/OS. A customization tool provided by Tivoli OPC identifies the types of problems that can be automatically entered into the Tivoli Information Management for z/OS database. Problems matching the identification criteria are forwarded to Tivoli Information Management for z/OS for recording and storage.

Problem and Usage Support

Tivoli Customer Support recognizes that you expect software products to provide solutions for your business problems. The reality is that software products alone cannot accomplish this. It takes people and processes to build the complete solution. Tivoli Customer Support provides technical resources required for successful implementation of Tivoli software products. If you have problems, you can get product problem support in various ways. You can receive support through the Tivoli Customer Support Web site (www.tivoli.com/support), IBMLink™, e-mail, or the phone.

National Language Support

Tivoli Information Management for z/OS supports national languages other than U.S. English by providing the following:

- Character translate tables to enable the use of Latin or non-Latin characters
- Uppercase translate tables for Latin alphabets

- Double-byte character set (DBCS) support
- Program exits for alternate date and time-of-day formats.

Time Zone and Date Format Support

Tivoli Information Management for z/OS supports the processing of date and time data in universal time, coordinated on the Prime Meridian enabling you to implement time zone processing as an option. With this capability, users in different geographic areas who share a common database can enter and view dates and times in their own time zones, regardless of how or where records were entered. Regardless of user preference, dates, times, and history data for dates and times are stored in universal time and converted to the user's local time upon display. In addition, universal time processing keeps track of daylight savings time changes as they occur, and even allows the user to customize the time zone tables if needed.

With universal time processing, you can find problems that occurred within a period of time easily, even if they were entered in different time zones, and save analysts the confusion of converting time zones for events occurring simultaneously across the globe.

Want to Know More?

If you'd like more information about Tivoli Information Management for z/OS, visit our Web site at <http://www.tivoli.com/infoman>

**Tivoli
Information
Management
for z/OS**

Management Service	What It Does	What It Means for You
Integration with Tivoli management software	Shares information with networking resources in your computing environment.	Allows management of resources from a core set of applications.
Enterprise scalability	Scales to 400 gigabytes of information per database, supports multiple databases, and offers industry-leading performance.	Reduces training costs and administrative complexity, saving both time and money.
Java-based Desktop application	Allows you to access Tivoli Information Management for z/OS through a workstation GUI.	Harnesses the power of your mainframe to collect, store, and report on data from all IT resources.
Web browser interface	Enables you to create, update, and view information from any supported Web browser.	Extends the power of Tivoli Information Management for z/OS to the desktop. Provides an easy way to make information available to anyone who needs it.
Flexible options	Choose from an array of optional functions and features that are provided at no additional cost with the base product.	Makes information available to a much broader range of people, and allows easy access from remote locations.



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Tivoli is in the process of changing product names. Products referenced here may still be available under their old names, for example, TME® 10 Enterprise Console instead of Tivoli Enterprise Console.

This brochure provides general product information and is not intended to serve as a technical specification. Some features may be available only in a future release. Further, some product features may vary with each supported platform. Tivoli may also make improvements and changes in the products described in this brochure that affect the information presented about these products.

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