

Peregrine

# SCAuto for Tivoli® Business Systems Management (TBSM) Installation and User Guide

Release 1.0

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# Getting Started

Welcome to the *SCAuto for TBSM Installation and User Guide*. This guide has instructions to install SCAuto for TBSM 1.0. Follow the steps in this guide for a successful installation.

The *Installation and User Guide* has this information:

<b>This section</b>	<b>Provides information about</b>
<i>Chapter 1, Introduction</i>	This chapter provides an overview of features and concepts for SCAuto for TBSM.
<i>Chapter 2, Installation and configuration</i>	This chapter provides instructions for installing and configuring SCAuto for TBSM components.
<i>Chapter 3, Using SCAuto for TBSM</i>	This chapter provides instructions on how to use Problem Ticketing and Automatic Ticketing, as well as troubleshooting information.

## Installation CD

The installation CD contents include:

- SCAuto for TBSM installer:
  - Application files
  - Event mapping files
  - SQL files

- Unload file
- PDF of the *Installation Guide*

## Knowledge Requirements

The instructions in this guide assume a working knowledge of Peregrine Systems ServiceCenter, TBSM, and your installation platform.

- For information about a particular platform, see the appropriate platform documentation.
- For information about installing or administering ServiceCenter, see the ServiceCenter documentation.
- For information about installing or administering IBM Tivoli Business Systems Manager (TBSM), see the TBSM documentation.

## Need further assistance?

For further information and assistance with this release, you can download documentation or schedule training.

## Customer Support

For further information and assistance, contact Peregrine Systems Customer Support at [support.peregrine.com](http://support.peregrine.com).

If the KnowledgeBase does not contain an article that addresses your concerns, you can search for information by product; search discussion forums; and search for product downloads.

## Documentation Web site

For a complete listing of current SCAuto for TBSM documentation, see the Documentation pages on the Peregrine Customer Support Web.

You can view PDF files, including release notes using Adobe Reader™, which is available at [www.adobe.com](http://www.adobe.com).

## Education Services Web site

Peregrine Systems offers classroom training anywhere in the world, as well as “at your desk” training via the Internet. For a complete listing of Peregrine’s training courses, see [www.peregrine.com/education](http://www.peregrine.com/education). You can also contact Peregrine Systems Education Services at +1 858.794.5009.





# 1 Introduction

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## CHAPTER

This chapter contains an overview of SCAuto for Tivoli Business Systems Manager (TBSM). Contents include:

- *Feature overview* on page 10
- *Terminology* on page 12
- *Product contents* on page 13

## Feature overview

IBM Tivoli Business Systems Manager (TBSM) simplifies management of today's mission-critical business systems by providing the ability to manage real time problems in the context of an enterprise's business priorities. TBSM maps physical infrastructure elements to business service groupings. The SCAuto for TBSM integration enriches the TBSM environment by providing an interface with ServiceCenter, linking the business systems point of view with the service management perspective.

SCAuto for TBSM integrates the Tivoli Business Systems Manager console to ServiceCenter's Incident Management application. SCAuto for TBSM allows users to perform the following incident management tasks:

- Manual problem ticketing
  - Manually open incidents in ServiceCenter
  - Manually update incidents in ServiceCenter
  - Manually close incidents in ServiceCenter
- Automatic problem ticketing
  - Automatically open incidents in ServiceCenter based on events in TBSM
- Automatic close event notification
  - Automatically removes the problem note icon from a TBSM object when all related incidents are closed in ServiceCenter

SCAuto for TBSM does not require a ServiceCenter client, but changes made from ServiceCenter clients are reflected in the TBSM console.

## Manual problem ticketing

SCAuto for TBSM manual problem ticketing has the following workflow:

- The user makes a problem ticketing request
- TBSM launches the SCAuto for TBSM problem ticketing application
- TBSM generates an input file for the problem ticketing request
- The SCAuto for TBSM problem ticketing application parses the input file to identify the type of problem ticketing request being made and then formats and maps the request to a ServiceCenter event
- ServiceCenter processes the event and performs the appropriate Incident Management action required

- The SCAuto for TBSM problem ticketing application sends a formatted output file back to TBSM
- TBSM reads the output file and displays the results in the TBSM console

## Automatic problem ticketing

SCAuto for TBSM automatic problem ticketing has the following workflow:

- A recognized event occurs in TBSM
- TBSM launches the SCAuto for TBSM automatic ticketing application
- TBSM generates an input file for the automatic ticketing request
- The SCAuto for TBSM automatic ticketing application parses the input file and maps the automatic ticketing request to a ServiceCenter event
- ServiceCenter processes the event and creates the incident
- The SCAuto for TBSM automatic ticketing application sends the ServiceCenter incident number back to TBSM as a formatted output file

## Automatic close event notification

SCAuto for TBSM automatic close event notification has the following workflow:

- The automatic close event notification process periodically queries ServiceCenter for a list of closed incidents associated with TBSM
- For each closed incident, SCAuto for TBSM creates a command line call to TBSM's problem integration event notification application
- TBSM's problem integration event notification application handles the problem ticket close event from here.

# Terminology

The following sections define terms used with SCAuto for TBSM.

## Differences between TBSM and ServiceCenter

SCAuto for TBSM uses a slightly different vocabulary than a stand-alone TBSM system. The following table summarizes these differences.

<b>TBSM term</b>	<b>Equivalent term in ServiceCenter</b>
Problem ticket	Incident
Severity	Priority
Problem type	Category
Assignee Group	Assignment
Status Code	Status
Short description	Brief description

## TBSM specific vocabulary

The following table defines terms used with TBSM.

<b>Terms</b>	<b>Definition</b>
Program User Exit	An exit point in the TBSM console where TBSM transfers control to another application, in this case SCAuto for TBSM.
Request Processor	The external application called by a Program User Exit. SCAuto for TBSM includes two request processors: an automatic problem ticketing request processor and a manual problem ticket request processor.
Problem Integration Event Notification	TBSM application that removes the Problem Note icon from the TBSM console when all associated Problem Tickets (incidents) have been closed.
Problem Note	An icon in the TBSM console that indicates that an object has an associated Problem Ticket.

## SCAuto for TBSM specific vocabulary

The following table defines terms used within SCAuto for TBSM.

<b>Term</b>	<b>Definition</b>
Automatic Ticketing	The process by which events in the TBSM console automatically trigger the creation of Problem Tickets in TBSM and incidents in ServiceCenter.
Auto Ticket Request Processor	SCAuto for TBSM application that processes incoming Auto Tickets and starts the appropriate ServiceCenter incident event.
Problem Ticket Request Processor	SCAuto for TBSM application that processes incoming TBSM Problem Tickets and starts the appropriate ServiceCenter incident event.
Automatic Close Event Notification	SCAuto for TBSM application that creates a command line call to TBSM's Problem Integration Event Notification application.
SCEventIn Mapping Script	Script responsible for mapping TBSM Problem Ticket details to ServiceCenter events.
SCEventOut Mapping Script	Script responsible for mapping ServiceCenter Incidents details to TBSM Problem Ticket details.

## Product contents

SCAuto for TBSM consists of the following components:

<b>Component</b>	<b>Description</b>
SCAuto for TBSM CD	Contains the installer and the documentation.
SCAuto for TBSM installer	Setup wizard
SCAuto for TBSM Installation and User Guide	This manual.
SCAuto for TBSM unload files	ServiceCenter unload files for configuration



# 2 Installation and configuration

## CHAPTER

This chapter contains installation and configuration instructions for SCAuto for Tivoli Business Systems Manager (TBSM). Contents include:

- *Installing SCAuto for TBSM* on page 16
- *Running the SCAuto for TBSM installer* on page 18
- *Adding new fields to the database dictionary* on page 22
- *Loading files into ServiceCenter* on page 27
- *Adding a format control for automatic close events* on page 29
- *Starting the automatic close event notification service* on page 48
- *Updating SCAuto for TBSM mappings* on page 34
- *Configuring the database server for SCAuto for TBSM* on page 42
- *Configuring TBSM to access problem ticketing* on page 46
- *Removing SCAuto for TBSM* on page 49

# Installing SCAuto for TBSM

The installation process for SCAuto for TBSM consists of the following general steps:

- Step 1** Review installation requirements. See *Installation requirements* on page 16.
- Step 2** Run the SCAuto for TBSM installer on the TBSM Database Server. See *Running the SCAuto for TBSM installer* on page 18.
- Step 3** Add five new fields to the ServiceCenter probsummary dbdict. See *Adding new fields to the database dictionary* on page 22.
- Step 4** Load the RAD application, event maps, and event registrations, and formats into ServiceCenter. See *Loading files into ServiceCenter* on page 27.
- Step 5** Add a format control to ServiceCenter to communicate with the automatic close event notification service. See *Adding a format control for automatic close events* on page 29.
- Step 6** Update the SCAuto for TBSM mapping files if you have customized the fields used by ServiceCenter Incident Management. See *Updating SCAuto for TBSM mappings* on page 34.
- Step 7** Configure the TBSM database server to launch SCAuto for TBSM applications for problem ticketing and automatic ticketing. See *Configuring the database server for SCAuto for TBSM* on page 42.
- Step 8** Configure the user names and passwords that TBSM uses to access problem ticketing. See *Configuring TBSM to access problem ticketing* on page 46.
- Step 9** Start the automatic close event notification service. See *Starting the automatic close event notification service* on page 48.

The following sections describe these steps in greater detail.

## Installation requirements

To install SCAuto for TBSM you must have the following information and components:

- TBSM Database Server installation
- Administrative access to the system running the TBSM Database Server



- Administrative access to a ServiceCenter 5.1.x or later installation
- SCAuto SDK license (required for integrations with ServiceCenter 5.1.2 and earlier and for ServiceCenter 6.0)
- A recent backup of your ServiceCenter data and database dictionary
- Know the host name and communications port used by SCAuto to communicate with the ServiceCenter server
- The SCAuto for TBSM installation CD

## Running the SCAuto for TBSM installer

The SCAuto for TBSM installer copies all the necessary files to the system running the TBSM Database Server. Use the following steps to copy all the necessary files to the TBSM Database Server.

To run the SCAuto for TBSM installer:

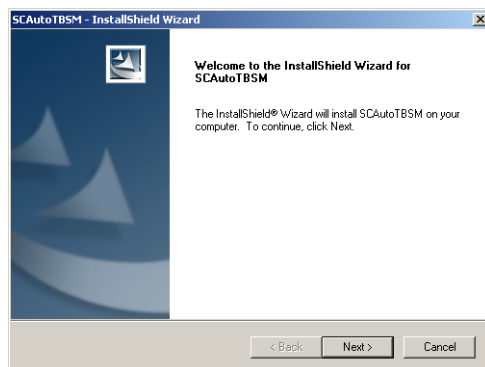
- 1 Login to the Windows system running the TBSM Database Server as a user with local administrator privileges.
- 2 Insert the SCAuto for TBSM installation CD-ROM into the appropriate drive of the server.
- 3 Do one of the following:
  - Use Windows Explorer to navigate to the CD-ROM directory. Double-click `setup.exe`.
  - Start the SCAuto for TBSM installation from the Windows command prompt. Type the following:

```
cd D:
```

```
setup
```

where **D** identifies the CD-ROM drive. Substitute your CD-ROM drive identifier.

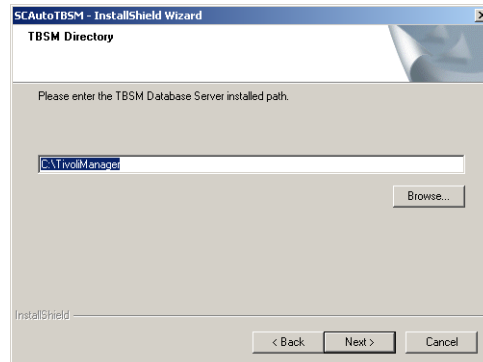
The SCAuto for TBSM Server Setup wizard opens.



- 4 Click **Next** to read and accept the licensing agreement.

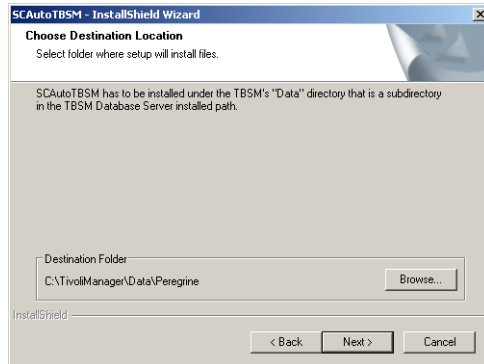


- 5 Select the **I accept the terms in the License Agreement** option.  
The **Next** button becomes active.
- 6 Click **Next** to select the TBSM directory.



- 7 Type or browse to the folder where the TBSM Database Server is installed.  
The default path is:  
**C:\TivoliManager**

- 8 Click **Next** to choose the installation location.



- 9 Type or browse to the folder where you want SCAuto for TBSM files installed.

---

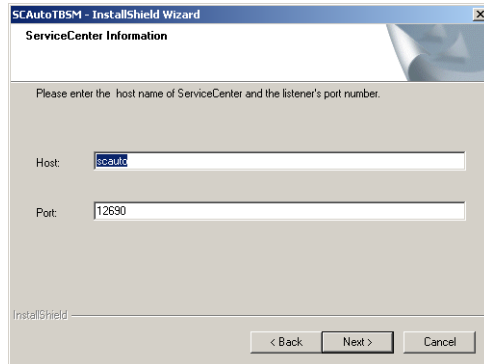
**Important:** The SCAuto for TBSM files must be installed in the \Data folder of the TBSM installation.

---

The default path is:

C:\TivoliManager\Data\Peregrine

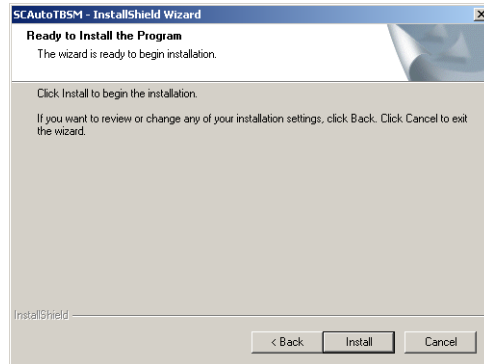
- 10 Click **Next** to type the ServiceCenter server information.



- 11 Type the following information.

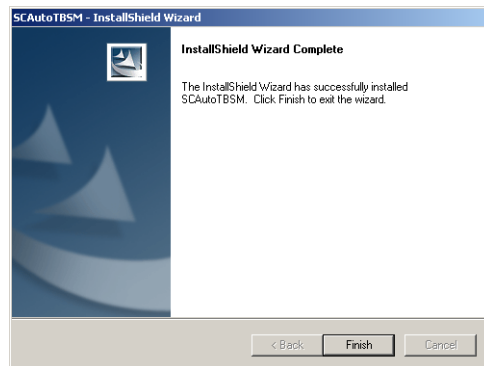
- **Host.** Type the ServiceCenter host name or IP address.
- **Port.** Type the communications port on which ServiceCenter is listening for SCAuto requests. The default port is 12690.

## 12 Click **Next** to begin the installation.



## 13 Click **Install**.

The installer copies the SCAuto for TBSM files to the locations you specified.



## 14 Click **Finish** to complete the wizard.

## Adding new fields to the database dictionary

SCAuto for TBSM requires five new fields to be added to the ServiceCenter probsummary database dictionary. These fields allow the ServiceCenter incidents created from TBSM Problem Tickets to be uniquely identified as originating from SCAuto for TBSM. Use the following steps to change the ServiceCenter database dictionary for SCAuto for TBSM.

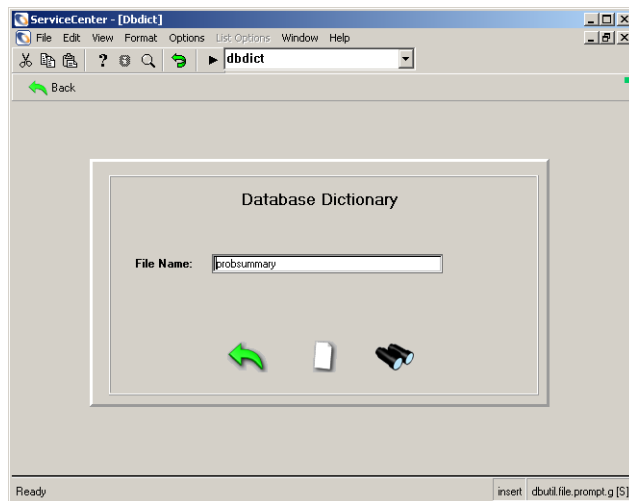
To add new fields to the ServiceCenter dbdict:

- 1 Login to ServiceCenter with an administrative account.
- 2 Type the following command into the ServiceCenter command line and press ENTER:

```
dbdict
```

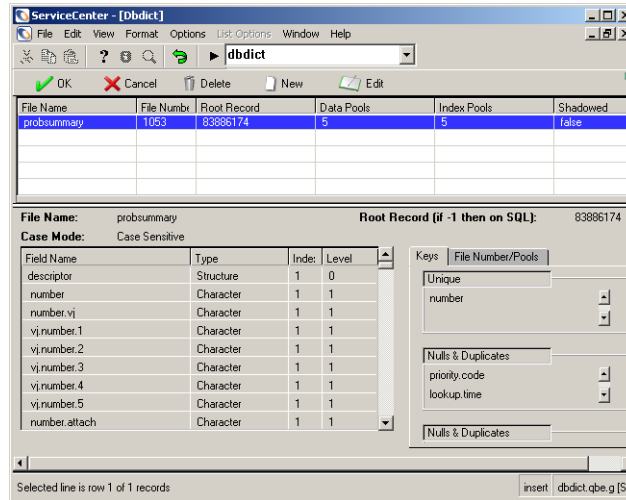
**Note:** You can enable the ServiceCenter command line by selecting **View > Command Line** from the ServiceCenter client.

The dbutil.file.prompt.g form opens.



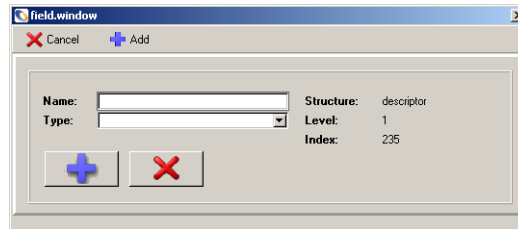
- 3 In the File Name field, type the following and press ENTER:  
probsummary

The dbdict.qbe.g form opens.



#### 4 Click New.

The field.window page opens.

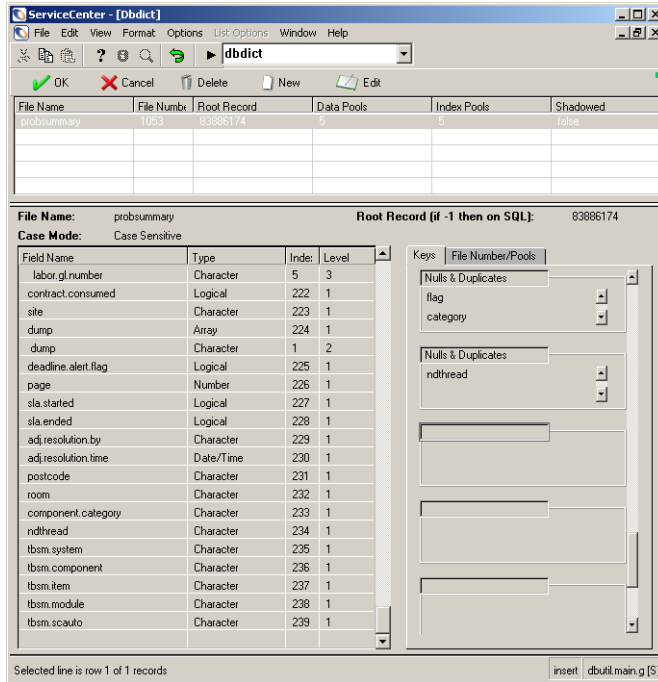


#### 5 Type the following information for each of the following five fields and click Add.

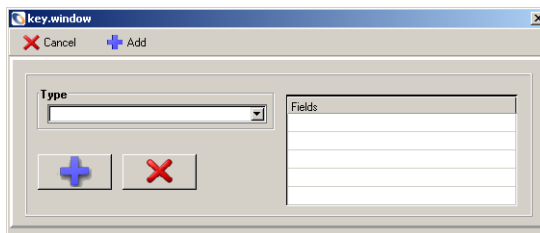
Name	Type
tbsm.system	character
tbsm.component	character
tbsm.item	character
tbsm.module	character
tbsm.scauto	character

**Important:** Database dictionary entries are case-sensitive. The fields names must be in all lower case.

- 6 In the Keys tab, scroll down to the first available key entry.

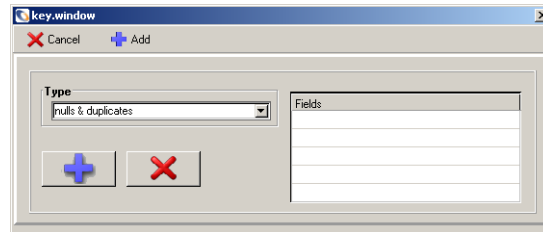


- 7 Right-click on the empty key field and then click New. The key.window page opens.

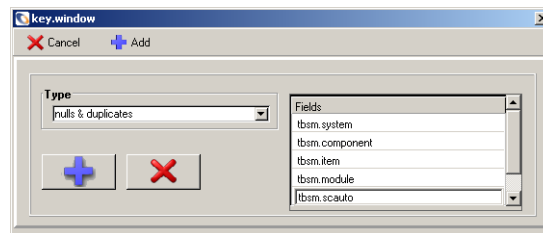




8 From the Type field, select nulls & duplicates.



- 9 Click on the first blank entry in the Fields array, and add the five fields you created earlier.
- tbsm.system
  - tbsm.component
  - tbsm.item
  - tbsm.module
  - tbsm.scauto



10 Click Add.

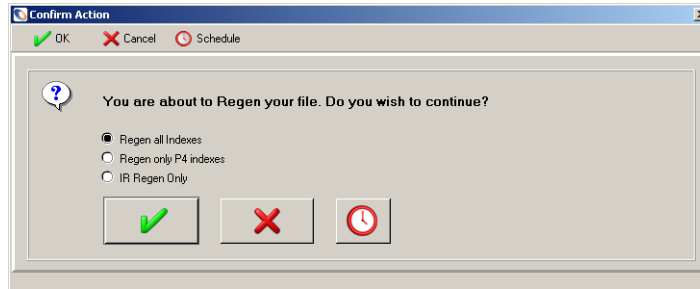
The dbutil.main.g window returns to focus.

11 Click OK.

One of two screens opens:

- If you are using the default P4 database, go to step 12.
- If you are using an RDBMS, go to step 15.

- 12 The Confirm Action window opens.

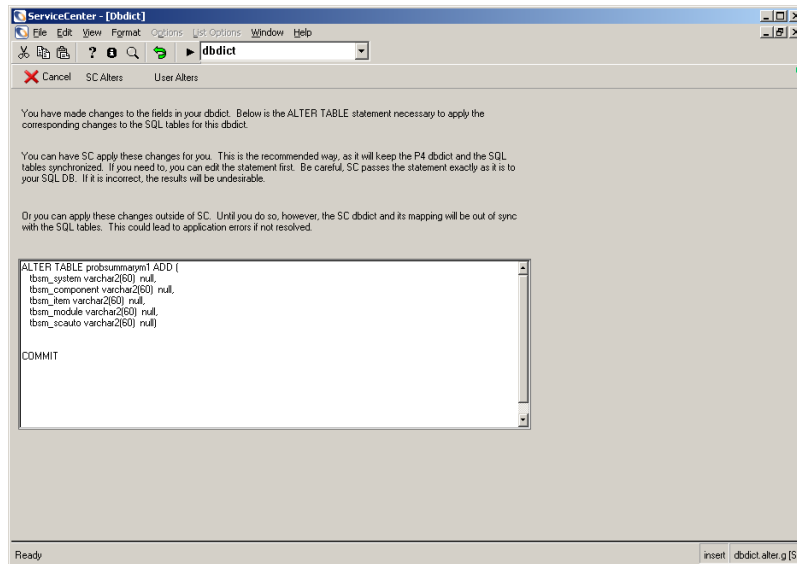


- 13 Select the **Regen all Indexes** option.

- 14 Click **OK**.

ServiceCenter regenerates the probsummary indexes.

- 15 The dbict.aler.g form opens.



- 16 Review the SQL statements in the text box.

- 17 Click **SC Alters**.

ServiceCenter regenerates the probsummary indexes on the RDBMS.

## Loading files into ServiceCenter

The SCAuto for TBSM installation CD includes a ServiceCenter unload file that contains all the RAD application, event maps, event registrations, and formats needed to integrate TBSM with ServiceCenter Incident Management. Use the following steps to load the SCAuto for TBSM unload file into ServiceCenter.

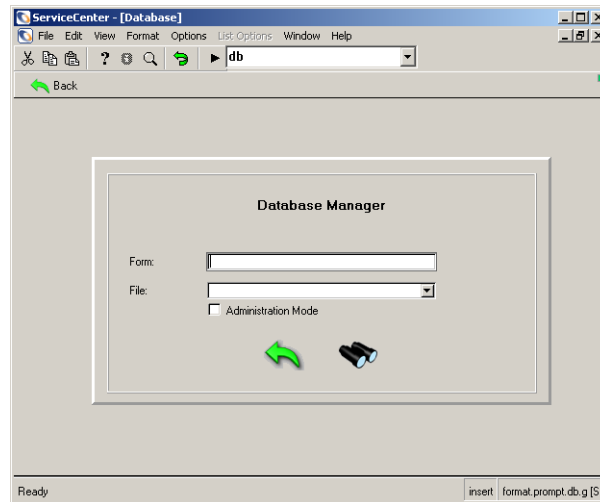
### To load the SCAuto for TBSM unload file into ServiceCenter:

- 1 Login to ServiceCenter with an administrative account.
- 2 Type the following command into the ServiceCenter command line and press ENTER:

db

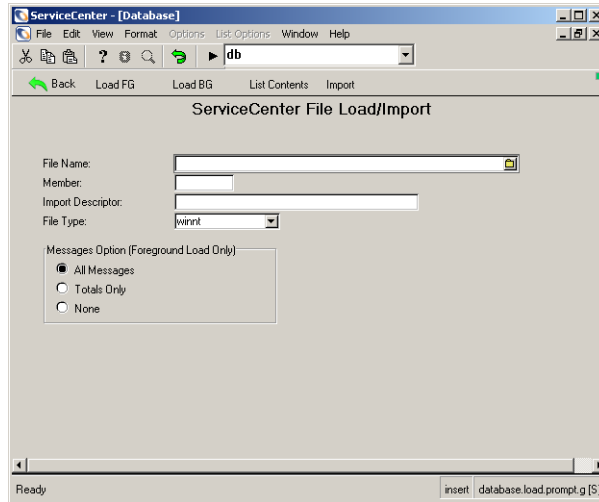
**Note:** You can enable the ServiceCenter command line by selecting **View > Command Line** from the ServiceCenter client.

The format.prompt.db.g form opens.



- 3 Click **Options > Import/Load**.

The database.load.prompt.g form opens.



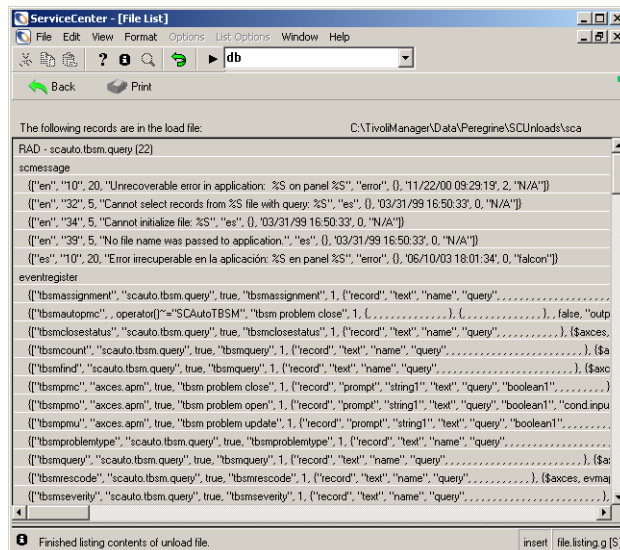
- 4 In the File Name field, type or browse to the scauto.tbsm.unl file in the SCUnloads subfolder of your SCAuto for TBSM installation.

The default path is:

C:\TivoliManager\Data\Peregrine\SCUnloads\scauto.tbsm.unl

- 5 Click List Contents.

The file.listing.g form opens.



- 6 Review the unload contents and verify that there are no conflicts with any customizations you have in your ServiceCenter system.

See *List of changes made in ServiceCenter by the unload file* on page 29 for a review of the changes the unload file will make.

- 7 Click **Back** to return to the database.load.prompt.g form.
- 8 Click **Load FG**.

ServiceCenter loads the file into the ServiceCenter system.

## List of changes made in ServiceCenter by the unload file

The SCAuto for TBSM unload file makes the following changes to the ServiceCenter database:

- Adds 1 RAD application `scauto.tbsm.query`
- Adds 5 error messages
- Adds 13 event types to the eventregister file
- Adds 86 event mappings to the eventmap file
- Creates 1 file `tbsmdata`
- Adds 51 records to the `tbsmdata` file
- Adds 2 formats to the format file

## Adding a format control for automatic close events

In order for SCAuto for TBSM to know that users have closed incidents in ServiceCenter, you must add a format control subroutine to the `problem.template.close` form. Use the following steps to add a format control for ServiceCenter incident close events.

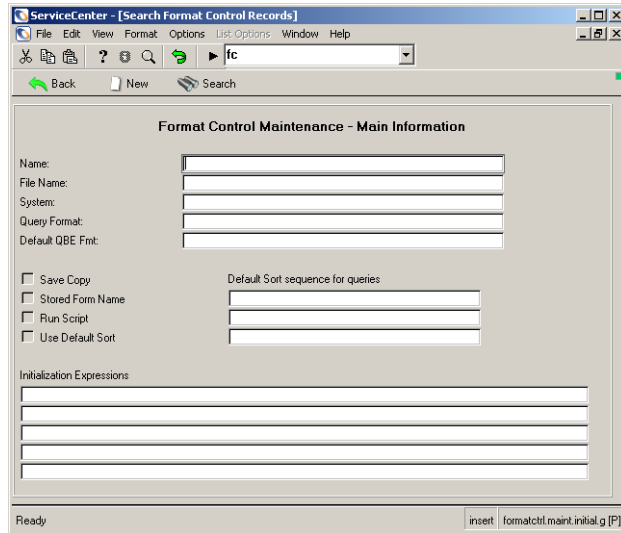
### To add a format control for ServiceCenter close events:

- 1 Login to ServiceCenter with an administrative account.
- 2 Type the following command into the ServiceCenter command line and press ENTER:

```
fc
```

**Note:** You can enable the ServiceCenter command line by selecting **View > Command Line** from the ServiceCenter client.

The `formatctrl.maint.initial.g` form opens.



The screenshot shows a web browser window titled "ServiceCenter - [Search Format Control Records]". The address bar contains "fc". The main content area is titled "Format Control Maintenance - Main Information" and contains the following fields and options:

- Name:
- File Name:
- System:
- Query Format:
- Default QBE Fmt:
- Save Copy
- Stored Form Name
- Run Script
- Use Default Sort
- Default Sort sequence for queries:
  - 
  - 
  -
- Initialization Expressions:
  - 
  - 
  - 
  -

The status bar at the bottom shows "Ready" and "insert formatctrl.maint.initial.g [P1]".

- 3 In the application name field, type the following:  
`problem.template.close`
- 4 Click **Search**.

The formatctrl.qbe.g form opens.

name	file name	system	sysmoduser	sysmodtime
problem.template.close		Incident Management	falcon	05/01/03 14:52:19

**Format Control Maintenance - Main Information**

Name:  View: short

File Name:

System:

Query Format:

Default QBE Fmt:

Save Copy

Stored Form Name

Run Script

Use Default Sort

Default Sort sequence for queries

Initialization Expressions

Selected line is row 1 of 1 records  formatctrl.qbe.g [F]

**5 Click Subroutines.**

The formatctrl.maint.subs.b.g form opens.

**6 Click Options > Show Expanded Form.**

The formatctrl.maint.subs.v.g form opens.

ServiceCenter - [Format Control problem.template.close]

File Edit View Format Options List Options Window Help

OK Back Add Save Delete

name	file.name	system	sysmoduser	sysmodtime
problem.template.close	Incident Management	talon		05/01/03 14:52:19

Views Queries Calculations Validations Subroutines Addl Options Privileges

**Format Control Maintenance - Subroutines**

Name: problem.template.close View: long

**Subroutines**

Application Name: validate fields

Comments:

Names	Values	\$file
second file		
names		vall("category","subcategory")

Error Message:

Add:

Update: true

Delete:

Before: true

Display:

Initial:

Selected line is row 1 of 1 records insert formatctrl.maint.subs.v.g [F1]

7 Scroll down to the first blank subroutine.



## 8 Type in the following information for the new subroutine:

Subroutine field	Type this value
Application Name	axces.write
Names	record
Values	\$file
Names	name
Values	tbsmautopmc
Error Message	Cannot write output event.
Update	tbsm.scauto in \$file="SCAutoTBSM"

The screenshot shows a window titled "ServiceCenter - [Format Control: problem.template.close]". The window contains a menu bar (File, Edit, View, Format, Options, List Options, Window, Help) and a toolbar with icons for OK, Back, Add, Save, and Delete. Below the toolbar is a table with columns: name, file.name, system, sysmoduser, and sysmodtime. The table contains one row: problem.template.close, Incident Management, falcon, 05/01/03 14:52:19. Below the table are tabs for Views, Queries, Calculations, Validations, Subroutines, Add Options, and Privileges. The "Subroutines" tab is active, showing the "Format Control Maintenance - Subroutines" form. The form has a "Name" field with the value "problem.template.close" and a "View" dropdown set to "long". Under the "Subroutines" section, there are several fields: "Application Name" (axces.write), "Comments" (empty), "Names" (record), "Values" (\$file), "Names" (name), "Values" (tbsmautopmc), "Error Message" (Cannot write output event.), "Add" (empty), "Update" (tbsm.scauto in \$file='SCAutoTBSM'), "Delete" (empty), "Before" (empty), and "Display" (empty). At the bottom of the window, it says "Selected line is row 1 of 1 records" and "insert | formatctrl.maint.subs.v.g [F1]".

## 9 Click Save.

ServiceCenter displays the message:

Format Control record updated.

## Updating SCAuto for TBSM mappings

SCAuto for TBSM uses a set of mapping files and ServiceCenter events to describe what ServiceCenter fields map to particular TBSM fields. You can use the default mapping files and ServiceCenter events installed during setup if you are using an unmodified installation of ServiceCenter Incident Management. You only need to change the SCAuto for TBSM mappings if:

- You added custom fields to your ServiceCenter Incident Management installation that you want to appear in the TBSM console
- You want to change the ServiceCenter field information that displays for a particular TBSM console field
- You want to add a new TBSM field that maps to a ServiceCenter field in the TBSM console.

### List of mappings

There are two sets of mapping files. One set for mapping events and fields going into ServiceCenter and another set of mapping files for mapping events and fields coming out from ServiceCenter and going to the TBSM console.

#### Map files in the ToSC folder

The following map files reside in the `\Data\Peregrine\EventMap\ToSC` folder of your SCAuto for TBSM installation. These files determine what TBSM fields correspond to ServiceCenter fields names.

Map file	Description
tbsmcount.map	Mapping for counting the number of open tickets on TBSM items.
tbsmfind.map	Mapping for finding a specific incident in ServiceCenter for the requested TBSM object.
tbsmpmc.map	Mapping for closing an incident in ServiceCenter for the requested TBSM object.
tbsmpmo.map	Mapping for opening an incident in ServiceCenter for the requested TBSM object.
tbsmpmu.map	Mapping for updating an incident in ServiceCenter for the requested TBSM object.

Map file	Description
tbsmquery.map	Mapping for querying ServiceCenter for all open incidents associated with a requested TBSM object.
tbsmreqadhoc.map	Mapping for querying ServiceCenter for all incidents that match a particular search criteria for a requested TBSM object.

The first line in the map file determines whether SCAuto for TBSM creates a query string or event field.

### Map files in the FromSC folder

The following map files reside in the \Data\Peregrine\EventMap\FromSC folder of your SCAuto for TBSM installation. These files only need to be updated if you want to change what TBSM fields display in the TBSM console.

Map file	Description
tbsmevnotify.map	Mapping for creating the command line options of the TBSM Problem Integration Event Notification application (IntEventServer.exe).
tbsmfind.map	Mapping for creating a TBSM output file for a found problem ticket.
tbsmpmc.map	Mapping for creating a TBSM output file for a closed problem ticket.
tbsmpmo.map	Mapping for creating a TBSM output file for an opened problem ticket.
tbsmpmu.map	Mapping for creating a TBSM output file for an updated problem ticket.
tbsmquery.map	Mapping for creating a TBSM output file for all open problem tickets for a requested TBSM object.
tbsmreqadhoc.map	Mapping for creating a TBSM output file for all problem tickets that match a particular search criteria for a requested TBSM object.

### File format

The FromSC mapping files use the following formatting conventions:

- Comments are indicated with a pound sign (#) at the start of the line

- Any text that you enclose between double quotation marks (“text”) is treated as a literal string
- You can use the plus sign (+) to concatenate two fields or literal strings. For example:  
\$field1+\$field2  
\$field1+“literal string1”
- You can use the colon (:) as an OR statement. To select data from more than one TBSM field, enclose the field names in parentheses and use colons as a separator. For example, the value (\$REQUEST\_SEVERITY:\$REQUEST\_EVENT\_PRIORITY) selects data from the REQUEST\_SEVERITY TBSM field or, if that field is empty or null, from the REQUEST\_EVENT\_PRIORITY TBSM field.

### Event maps in ServiceCenter

SCAuto for TBSM includes 86 event maps to open, update, close, and query for incidents. Use the following procedure to see a complete listing of these event maps.

#### To view all the SCAuto for TBSM event maps:

- 1 Login to ServiceCenter with an administrative account.
- 2 Type the following command into the ServiceCenter command line and press ENTER:

```
eventmap
```

**Note:** You can enable the ServiceCenter command line by selecting **View > Command Line** from the ServiceCenter client.

The event.map.g form opens.

- 3 In the Map Name field, type tbsm.
- 4 Click Search.

The eventmap.qbe.g form opens with a list of all SCAuto for TBSM events maps.

Map Name	Seq	Pos	File Name	Field Name	Query
tbsm problem close	1	1	probsummary	number	
tbsm problem close	1	2	probsummary	tbsm.system	
tbsm problem close	1	3	probsummary	tbsm.component	
tbsm problem close	1	4	probsummary	tbsm.item	
tbsm problem close	1	5	probsummary	tbsm.module	
tbsm problem close	1	6	probsummary	category	
tbsm problem close	1	7	probsummary	assignment	
tbsm problem close	1	8	probsummary	assignee.name	
tbsm problem close	1	9	probsummary	priority.code	
tbsm problem close	1	10	probsummary	severity.code	
tbsm problem close	1	11	probsummary	brief.description	
tbsm problem close	1	12	probsummary	update.action	
tbsm problem close	1	13	probsummary	resolution	
tbsm problem close	1	14	probsummary	version	
tbsm problem close	1	15	probsummary	closed.by	

## Modifying SCAuto for TBSM mappings

You can make the following changes to SCAuto for TBSM mapping files:

- Display data from custom ServiceCenter fields in the TBSM console. See *Displaying data from custom ServiceCenter fields* on page 38.
- Change what ServiceCenter field that maps to a TBSM field. See *Changing the ServiceCenter field that maps to a TBSM field* on page 40.
- Add a new TBSM field that maps to a ServiceCenter field. See *Adding a new TBSM field that maps to a ServiceCenter field* on page 41.

---

**Warning:** Making changes to map files and ServiceCenter event maps may result in mapping errors and a loss of functionality. It is strongly recommended that you consult Peregrine Customer Support for assistance when changing map files and event maps.

---

The following sections describe how to modify the SCAuto for TBSM mappings files for each scenario.

### Displaying data from custom ServiceCenter fields

To display data from a custom ServiceCenter field you need to change to ServiceCenter event map. Depending upon the content of the custom field, you may also have to change a map file to display this data in a particular TBSM field.

#### To change the ServiceCenter event map to use a custom field:

- 1 Login to ServiceCenter with an administrative account.
- 2 Type the following command into the ServiceCenter command line and press ENTER:

```
eventmap
```

**Note:** You can enable the ServiceCenter command line by selecting **View > Command Line** from the ServiceCenter client.

The event.map.g form opens.

- 3 If your custom field replaces an existing ServiceCenter field, do the following:
  - a In the **Map Name** field, type **tbsm**.
  - b Type the original field name in the **Field Name** field.
  - c Click **Search**.
 

The eventmap.qbe.g form opens displaying a list of event maps that match your search criteria.
  - d Update the **Field Name** field of each event map with your custom field and save it.
 

ServiceCenter now uses your custom field as part of the SCAuto for TBSM event mapping.
- 4 If the custom field you want to add is in addition to the existing ServiceCenter fields, create an event map using the following criteria:
  - Create an event map for each action in which the custom field applies:
    - tbsm problem close
    - tbsm problem open
    - tbsm problem update
    - tbsm problem query
  - The **Sequence** field must always have a value of 1.

- The **Position** field should be the next number in the series of existing event maps of its type. For example, there are nineteen existing fields in the tbsm problem close event, so to add a custom field to this event map you must type a **Position** value of 20.
  - The **File Name** field should always have the value probsummary.
  - The **Field Name** field should have the value of your custom field.
- 5 Add an entry to the SCAuto for TBSM map files for the new field using the following criteria:
- The new entry must be in the same position as listed in the Position field of the ServiceCenter event map. For example, if you added a new field at position 20 in the event map, then your new field mapping should be the twentieth entry in the mapping file.
  - List the TBSM field you want the custom field to map to in both the ToSC and FromSC map files.
  - The TBSM field name should be preceded by the dollar sign character \$. The dollar sign character indicates that the field is an environmental variable.

### Changing the ServiceCenter field that maps to a TBSM field

To change only what ServiceCenter field a particular TBSM maps to, you need to change the ServiceCenter event map.

#### To change the ServiceCenter event map to use a different field:

- 1 Login to ServiceCenter with an administrative account.
- 2 Type the following command into the ServiceCenter command line and press ENTER:

```
eventmap
```

**Note:** You can enable the ServiceCenter command line by selecting **View > Command Line** from the ServiceCenter client.



The event.map.g form opens.

- 3 In the Map Name field, type tbsm.
- 4 Type the original field name you want to change in the Field Name field.
- 5 Click Search.

The eventmap.qbe.g form opens displaying a list of event maps that match your search criteria.

- 6 Update the Field Name field of each event map with the new field name and save it.

ServiceCenter now uses the new field name as part of the SCAuto for TBSM event mapping.

### Adding a new TBSM field that maps to a ServiceCenter field

To change the TBSM mapping, you need to change the ToSC and FromSC mapping files. Depending upon the content of the TBSM field you are mapping to, you may also need to update the ServiceCenter event map to use a particular ServiceCenter field.

#### To add a new TBSM field to the mapping files:

- 1 Open the existing mapping files in a text editor.
- 2 Add an entry to the SCAuto for TBSM map files for the new field using the following criteria:

- The new entry must be in the same position as listed in the Position field of the ServiceCenter event map. For example, if you added a new field at position 20 in the event map, then your new field mapping should be the twentieth entry in the mapping file.
  - List the TBSM field you want the custom field to map to in both the ToSC and FromSC map files.
  - The TBSM field name should be preceded by the dollar sign character \$. The dollar sign character indicates that the field is an environmental variable.
- 3 Save the mapping files.

## Configuring the database server for SCAuto for TBSM

SCAuto for TBSM requires the following changes to the TBSM Database Server:

- Activating a program user exit for problem ticketing that runs the SCAuto for TBSM application ProblemTicket.exe
- Activating a program user exit for automatic ticketing that runs the SCAuto for TBSM application AutoTicket.exe
- Enabling caching (enumeration) on the TBSM Database Server to save valid field values for the problem ticketing form
- Setting the time out value for SCAuto for TBSM to complete its tasks within 300 seconds before TBSM returns an error message
- Enabling the automatic closing of incidents in ServiceCenter when a problem ticket is closed from TBSM
- Defining the status value “Closed” as the ticket status that identifies closed problem tickets

You can make these changes automatically to the TBSM database server by running an isql command, or you can manually modify the SystemConfiguration table from TBSM.

To make the database changes automatically, see *Modifying the TBSM database server automatically* on page 43.

To make the database changes manually, see *Modifying the TBSM database server manually* on page 43.

## Modifying the TBSM database server automatically

To automatically configure the TBSM Database Server, you will need to have access to Isql (ISQL.EXE) provided with Microsoft SQL Server. The Isql application allows you to enter Transact-SQL statements and system procedures from an interactive command prompt as well as run Transact-SQL scripts. The Isql application is available in your <Microsoft SQL server installation folder>\tools\bin folder.

Use the following steps to automatically make all required changes to the TBSM database server.

### To automatically modify the TBSM database server:

- 1 Login in to the Windows system running the TBSM Database Server as a user with local administrator privileges.
- 2 Open a command prompt window.
- 3 Change directories to your SCAuto for TBSM installation.

For example:

```
cd C:\TivoliManager\Data\Peregrine\SQLFiles
```

- 4 Type the following command and press ENTER:

```
isql /U <dbuser> /P <dbuser password> /i instsql.txt
```

For <dbuser>, type the user name of a database user with administrative privileges.

For <dbuser password>, type the password for the database user.

Isql makes the necessary changes to the SystemConfiguration table.

## Modifying the TBSM database server manually

Use the following instructions to manually make the changes to the TBSM database server.

**Note:** For detailed instructions about performing the tasks in this procedure, see your TBSM documentation.

### To manually modify the TBSM database server:

- 1 Login the TBSM database server as a user with administrative privileges.
- 2 Open the SQL Query Analyzer application.  
The SQL Query Analyzer application is available from the following folder:  
<Microsoft SQL server installation folder>\tools\bin
- 3 Open the SystemConfiguration table in the database dictionary.
- 4 Add the following two rows to the SystemConfiguration table to define the request processor name.

Group name	Property name	Property value	Property data type
REQUEST_AUTOTICKET	REQUEST_PROCESSOR_NAME	<SCAuto for TBSM install directory>\AutoTicket.exe	CHAR
REQUEST_PROBLEM	REQUEST_PROCESSOR_NAME	<SCAuto for TBSM install directory>\ProblemTicket.exe	CHAR

- 5 Add the following row to the SystemConfiguration table to enable caching of problem ticketing field values on the TBSM database server.

Group name	Property name	Property value	Property data type
API_INTEGRATION_OPTIONS	TABLE_BASED_ENUMERATIONS	YES	CHAR

When the property value is set to YES, TBSM stores frequently requested problem ticket field values on the TBSM database server. This field caching removes the need to query the remote ServiceCenter system each time a field value is needed.

- 6 Add the following row to the SystemConfiguration table to set the time out value for SCAuto for TBSM to complete its tasks before TBSM returns an error message.

Group name	Property name	Property value	Property data type
API_INTEGRATION_OPTIONS	TIMEOUT_VALUE	300	CHAR

The recommended time out value is 300 seconds. Change the property value to increase or decrease the time out value.

- 7 Add the following row to the **SystemConfiguration** table to enable the automatic closing of incidents in ServiceCenter when a problem ticket is closed from TBSM.

Group name	Property name	Property value	Property data type
API_INTEGRATION_OPTIONS	AUTO_CLOSE_DEFAULT	YES	CHAR

When the property value is set to YES, TBSM sends a close incident event request to ServiceCenter when a problem ticket is closed in TBSM. When the property value is set to NO, then ServiceCenter incidents remain open.

- 8 Add the following row to the **SystemConfiguration** table to define the close status value that identifies closed problem tickets.

Group name	Property name	Property value	Property data type
API_INTEGRATION_OPTIONS	CLOSE_TICKET_STAUS_CODE	Closed	CHAR

This property value must match the ticket status value in ServiceCenter.

## Configuring TBSM to access problem ticketing

The TBSM console requires a user name and password to access the problem ticketing request processor. SCAuto for TBSM provides a default user name and password that you can use to access problem ticketing or you can manually define your own list of user names and passwords.

SCAuto for TBSM displays the problem ticketing user name in all problem tickets created from TBSM. If you want your TBSM problem tickets to display a different user name than the default name, you can define a custom list of user names and passwords.

### Creating custom problem ticketing user names and passwords

By default, SCAuto for TBSM uses the following user information to access problem ticketing:

User name	Password
SCAutoTBSM	password

This information is stored on the TBSM Database Server in the file `scusers.ini`. This file is a plain-text file with no encryption that only controls access to the SCAuto for TBSM problem ticketing applications. It does not list or require any ServiceCenter operator names or passwords.

You can use the following steps to create your own problem ticketing user names and passwords.

#### To create a custom problem ticketing user name and password:

- 1 Login in to the Windows system running the TBSM Database Server as a user with local administrator privileges.
- 2 Open the file `scusers.ini` in a text editor.

By default, this file is located in the following folder:

`C:\TivoliManager\Data\Peregrine`

- 3 Type the following information on a new line for each problem ticketing user you want to create:

```
<user name>=<password>
```

For *<user name>*, type the name of the problem ticketing user you want to create.

For *<password>*, type the password for the problem ticketing user you want to create.

- 4 Save the file.

## Entering the user name and password into the TBSM console

Use the following steps to enter the user name and password required for SCAuto for TBSM problem ticketing.

**To enter the SCAuto for TBSM user name and password:**

- 1 Login to the TBSM console with an administrator account.
- 2 Right-click on TBSM object and click **Problem Tickets > Create**.

The Create Problem Tickets page opens.

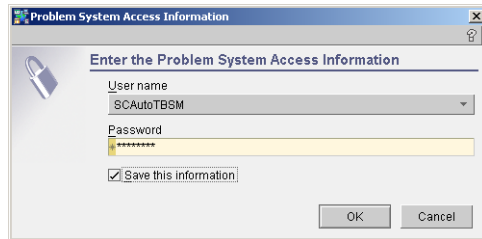
The screenshot shows a 'Create Problem Ticket' dialog box. The 'Ticket Information' section includes the following fields and values:

- System:** TBSM
- Problem type:** Problem System Password...
- Component:** ENT
- Assignee group:** (dropdown menu)
- Item:** 1
- Assignee name:** (text field)
- Module:** NetView
- Status code:** (dropdown menu)
- Severity:** (dropdown menu)
- Short description:** (empty text field)
- Description:** TBSM

At the bottom of the dialog, there is a checkbox labeled 'Open closure properties after creation' which is unchecked. To the right of this checkbox are 'Find', 'OK', and 'Cancel' buttons. A 'Done' label is located at the bottom left of the dialog.

- 3 Click **Problem System Password**.

The Problem System Access Information window opens.



4 Type the user name and password you defined in the `scusers.ini` file.

5 Select the **Save this information** option.

This option prevents you from having to type in the SCAuto for TBSM user name and password every time you want to use problem ticketing.

6 Click OK.

TBSM uses this user name and password information whenever you access problem ticketing.

## Starting the automatic close event notification service

The automatic close event notification service periodically queries ServiceCenter for closed incidents. You must start this service for automatic problem ticketing to function properly.

**To start the automatic close event notification service:**

1 Log in to the Windows system running the TBSM Database Server as a user with local administrator privileges.

2 Open the Windows Control Panel.

3 Open the Services application.

4 Select the following service:

SCAuto for TBSM Event Notification Service

5 Click **Start**.

**Tip:** You can set this service to automatic startup if you want it to start every time Windows starts.



## Removing SCAuto for TBSM

Completely removing SCAuto for TBSM from system requires the following basic steps:

- Step 1** Restore the ServiceCenter server from a back-up to remove the contents of the `scauto.tbsm.unl` file. See your ServiceCenter documentation for information on restoring from a back-up.
- Step 2** Remove the SCAuto for TBSM entries from the TBSM Database Server. See *Removing the SCAuto for TBSM entries from TBSM database* on page 49.
- Step 3** Remove the SCAuto for TBSM software using Windows Add/Remove Programs. See *Removing SCAuto for TBSM using Add/Remove Programs* on page 51.

### Removing the SCAuto for TBSM entries from TBSM database

You can remove the changes made to the TBSM database server by running an `isql` command, or by manually modify the SystemConfiguration table from TBSM.

To make the database changes automatically, see *Removing the TBSM database server entries automatically* on page 49.

To make the database changes manually, see *Removing the TBSM database server entries manually* on page 50.

#### Removing the TBSM database server entries automatically

Use the following steps to automatically make all required changes to the TBSM database server.

**To automatically remove entries from the TBSM database server:**

- 1 Login in to the Windows system running the TBSM Database Server as a user with local administrator privileges.
- 2 Open a command prompt window.
- 3 Change directories to your SCAuto for TBSM installation.

For example:

```
cd C:\TivoliManager\Data\Peregrine
```

#### 4 Type the following command and press ENTER:

```
isql /U <dbuser> /P <dbuser password> /i uninstsql.txt
```

For *<dbuser>*, type the user name of a database user with administrative privileges.

For *<dbuser password>*, type the password for the database user.

Isql removes the SCAuto for TBSM entries from the **SystemConfiguration** table.

### Removing the TBSM database server entries manually

Use the following instructions to manually remove the entries from the TBSM database server.

**Note:** For detailed instructions about performing the tasks in this procedure, see your TBSM documentation.

#### To manually remove entries from the TBSM database server:

- 1 Login into the TBSM database server as a user with administrative privileges.
- 2 Open the **SystemConfiguration** table in the database dictionary.
- 3 Remove the following rows from the **SystemConfiguration** table.

Group name	Property name	Property value	Property data type
REQUEST_AUTOTICKET	REQUEST_PROCESSOR_NAME	<SCAuto for TBSM install directory>\AutoTicket.exe	CHAR
REQUEST_PROBLEM	REQUEST_PROCESSOR_NAME	<SCAuto for TBSM install directory>\ProblemTicket.exe	CHAR
API_INTEGRATION_OPTIONS	TABLE_BASED_ENUMERATIONS	YES	CHAR
API_INTEGRATION_OPTIONS	TIMEOUT_VALUE	300	CHAR
API_INTEGRATION_OPTIONS	AUTO_CLOSE_DEFAULT	YES	CHAR
API_INTEGRATION_OPTIONS	CLOSE_TICKET_STATUS_CODE	Closed	CHAR

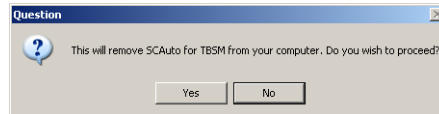
## Removing SCAuto for TBSM using Add/Remove Programs

You can use the Windows Add/Remove programs application from the Control Panel to remove SCAuto for TBSM files and registry entries.

### To remove SCAuto for TBSM using Add/Remove Programs:

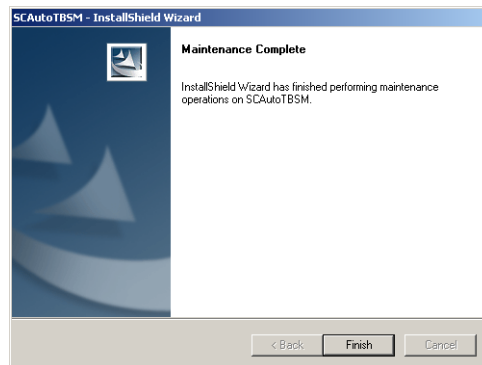
- 1 Login in to the Windows system running the TBSM Database Server as a user with local administrator privileges.
- 2 Open the Control Panel.
- 3 Click **Add or Remove Programs**.
- 4 Click the entry **SCAutoTBSM**.
- 5 Click **Change/Remove**.

The SCAuto for TBSM setup wizard opens.



- 6 Click **Yes**.

The setup wizard removes the SCAuto for TBSM software and registry entries. When complete, the Maintenance Complete pages opens.



- 7 Click **Finish** to complete the setup wizard.



# 3 Using SCAuto for TBSM

---

## CHAPTER

This chapter contains user and troubleshooting information. Contents include:

- *Problem ticketing* on page 54
- *Automatic ticketing* on page 61
- *Troubleshooting* on page 62

## Problem ticketing

The SCAuto for TBSM problem ticketing interface allows you to perform the following Incident Management tasks from the TBSM console:

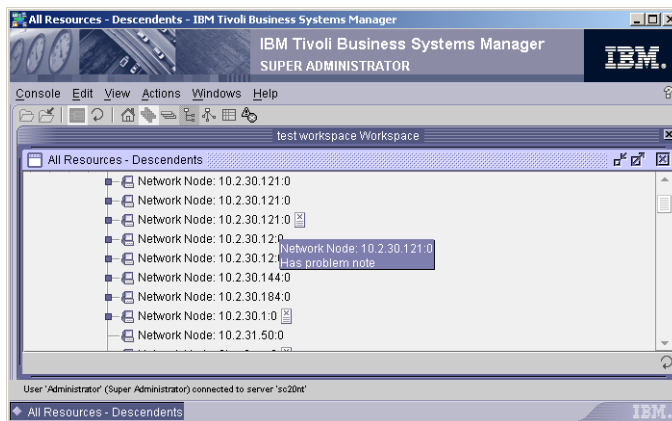
- Find all open ServiceCenter incidents associated with a TBSM object
- Query for ServiceCenter incidents that match a particular search criteria
- Create ServiceCenter incidents
- Update ServiceCenter incidents
- Close ServiceCenter incidents

### Finding all open ServiceCenter incidents associated with a TBSM object

TBSM displays a problem note icon next to objects that have ServiceCenter incidents associated with them. Use the following instructions to find all open ServiceCenter incidents associated with a particular TBSM object.

To find all ServiceCenter incidents associated with a TBSM object:

- 1 Login to the TBSM console.
- 2 Locate a TBSM object that has a problem note.



- 3 Right-click on the TBSM object, and then click **Problem Tickets > Find**.

The Find Problem Tickets page opens displaying a list of all ServiceCenter incidents associated with the current TBSM object.

The screenshot shows a window titled "Find Problem Tickets" with a search form and a results table. The search form includes fields for System (TBSM), Component (NODE), Item (442), and Module (10.2.30.121:0). It also has dropdown menus for Problem type, Assignee group, Assignee name, Status code, and Severity. A "Short description" text area is present. Below the form are "Find" and "Clear" buttons. The results section shows a table with 5 rows of incident data.

Problem	Date created	Reported by	Status code	Severity	Short description	A
IM20890	08:17 PM 06/08/04	SCAutoTBSM	Open	1	Node Down.	
IM20864	11:16 AM 06/09/04	SCAutoTBSM	Open	1	Node Down.	
IM20850	09:16 AM 06/09/04	SCAutoTBSM	Open	1	Node Down.	
IM20848	09:03 AM 06/09/04	SCAutoTBSM	Open	1	Node Down.	
IM20838	03:42 PM 06/07/04	SCAutoTBSM	Open	1	Node Down.	

Below the table, it says "Total: 5 Displayed: 5 Selected: 0". There are navigation arrows and a "Close" button at the bottom right.

## Querying for ServiceCenter incidents

You can query for specific ServiceCenter incidents from the TBSM Find Problem Tickets screen. This screen allows you to find tickets that match a particular search criteria.

To query for ServiceCenter incidents:

- 1 Follow the instructions in *Finding all open ServiceCenter incidents associated with a TBSM object* on page 54 to find all open ServiceCenter incidents associated with the TBSM object.
- 2 Type the search criteria you want to use to query ServiceCenter.
- 3 Click **Find**.

SCAuto for TBSM queries ServiceCenter and displays a list of incidents that match your search criteria.

**Problem Ticket Find Criteria**

System: TBSM    Problem type: network    Problem ID:

Component: NODE    Assignee group:

Item:     Assignee name:

Module:     Status code:

Severity:

Short description:

Find    Clear

**Results**

Problem ID	Date created	Reported by	Status code	Severity	Short description	A
IM21073	12:10 PM 06/22/04	Bob.helpdesk	Open	1 - Criti...	short description	fat
IM20867	02:44 PM 06/08/04	SCAutoTBSM	Open	2 - Urg...	TBSM	
IM20605	04:49 PM 06/02/04	SCAutoTBSM	Closed	3 - Nor...	TBSM	
IM20381	03:48 PM 05/24/04	SCAutoTBSM	Closed	3 - Nor...	TBSM	
IM20377	03:35 PM 05/24/04	SCAutoTBSM	Closed	3 - Nor...	TBSM	
IM20278	11:14 AM 05/20/04	SCAutoTBSM	Closed	3 - Nor...	TBSM	
IM20496	00:47 AM 06/01/04	Bob.Helpdesk	Closed	3 - Nor...	TBSM	
Total: 13 Displayed: 13 Selected: 0						

Close

Done

## Creating problem tickets

You can manually create problem tickets from the TBSM console. SCAuto for TBSM automatically creates a corresponding ServiceCenter incident based on your problem ticket.

### To create a problem ticket:

- 1 Login to the TBSM console.
- 2 Select the TBSM object that you want to create a problem ticket for.
- 3 Right-click the object and then click **Problem Tickets > Create**.

The Create Problem Tickets page opens.



#### 4 Type in the problem ticket details.

**Create Problem Ticket**

**Ticket Information**

System	TBSM	Problem type	network	Problem System Password...
Component	NODE	Assignee group	LAN SUPPORT	
Item	2	Assignee name		
Module	10.2.30.12.0	Status code	Open	
		Severity	2 - Urgent	

Short description  
Node not responding to ping

Description  
This node is not responding to ping requests.

Open closure properties after creation

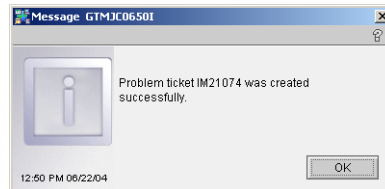
Find

OK Cancel

Done

#### 5 Click OK.

TBSM creates the problem ticket and displays a confirmation window.



## Updating problem tickets

You can manually update problem tickets from the TBSM console and SCAuto for TBSM automatically updates the corresponding ServiceCenter incident.

### To update a problem ticket:

- 1 Follow the instructions in *Querying for ServiceCenter incidents* on page 55 to search for the ServiceCenter incident you want to update.
- 2 From the Results pane, double-click the problem ticket you want to update.

The Problem Ticket Properties page opens.

**Problem Ticket Properties**

General properties for Problem Ticket

**General**

Closure

**Ticket Information**

System	Problem type	Problem ID	Problem System Password...
TBSM	network	IM21074	
Component	Assignee group	Reported by	
NODE	LAN SUPPORT	Bob.helpdesk	
Item	Assignee name	Date created	
2		12:50 PM 06/22/04	
Module	Status code	Date updated	
10.2.30.12.0	Open	12:50 PM 06/22/04	
	Severity		
	2 - Urgent		

Short description  
Node not responding to ping

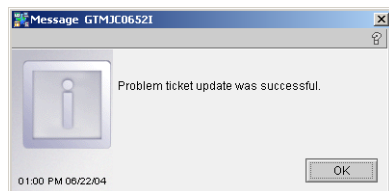
Description  
This node is not responding to ping requests. Add...

Done

OK Cancel

- 3 Type the problem ticket updates.
- 4 Click OK.

TBSM updates the problem ticket information and displays a confirmation window.



- 5 Click OK to close the confirmation window.

## Closing problem tickets

You can manually close problem tickets from the TBSM console and SCAuto for TBSM automatically closes the corresponding ServiceCenter incident as well as removes the problem note icon from the TBSM object node if there are no more outstanding problem tickets for the object.

### To close a problem ticket:

- 1 Follow the instructions in *Querying for ServiceCenter incidents* on page 55 to search for the ServiceCenter incident you want to close.
- 2 From the Results pane, double-click the problem ticket you want to close.

The Problem Ticket Properties page opens.

The screenshot shows the 'Problem Ticket Properties' dialog box. The 'General' tab is selected, showing the following information:

Ticket Information		
System	Problem type	Problem ID
TBSM	network	M21074
Component	Assignee group	Reported by
NODE	LAN SUPPORT	Bob.helpdesk
Item	Assignee name	Date created
2		12:50 PM 06/22/04
Module	Status code	Date updated
10.2.30.12:0	Open	12:50 PM 06/22/04
	Severity	
	2 - Urgent	

Short description  
Node not responding to ping

Description  
This node is not responding to ping requests.

Buttons: OK, Cancel

### 3 From the Status Code field, select Closed.

The screenshot shows the 'Problem Ticket Properties' dialog box with the 'General' tab selected. The 'Ticket Information' section contains the following fields:

Ticket Information		
System	Problem type	Problem ID
TBSM	network	IM21074
Component	Assignee group	Reported by
NODE	LAN SUPPORT	Bob.helpdesk
Item	Assignee name	Date created
2	Bob.helpdesk	12:50 PM 06/22/04
Module	Status code	Date updated
10.2.30.12.0	Closed	01:00 PM 06/22/04
	Severity	
	2 - Urgent	

Short description  
Node not responding to ping

Description  
This node is not responding to ping requests.

Buttons: OK, Cancel

**Note:** The actual label used for closed tickets is defined in the TBSM Database Server. See *Configuring the database server for SCAuto for TBSM* on page 42 for instructions on changing the closed status label.

### 4 Click Closure.

The Closure properties for Problem Ticket page opens.

## 5 Type the problem ticket closure information.

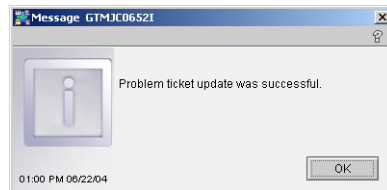
The screenshot shows the 'Problem Ticket Properties' dialog box with the 'Closure' tab selected. The 'Closure Information' section contains the following fields:

- Closure status:** A dropdown menu showing 'power fail'.
- Resolution code:** A dropdown menu showing 'Advice & Guidance'.
- Resolution:** A text area containing the text: '[Note Added by Administrator at 12:58 PM 06/22/04] Connected hardware to UPS'. An 'Add...' button is to the right.
- Root cause:** An empty text area with an 'Add...' button to the right.
- Further actions required:** An empty text area with an 'Add...' button to the right.
- Actions completed:** A checked checkbox.
- Data updated:** An unchecked checkbox.
- Effort:** An empty text field.

At the bottom right, there are 'OK' and 'Cancel' buttons. The status bar at the bottom left shows 'Done'.

## 6 Click OK.

TBSM closes the problem ticket and displays a confirmation window.



## 7 Click OK to close the confirmation window.

If all problem tickets for the TBSM object have been closed, TBSM removes the problem note icon from the object.

# Automatic ticketing

Automatic ticketing does not require any manual intervention from the TBSM console. TBSM creates problem ticket automatically based on event rules defined in the TBSM Database Server and a request processor definition for SCAuto for TBSM.

## Configuring automatic ticketing

SCAuto for TBSM automatically configures the request processor definition when you run the `isql` command described in *Configuring the database server for SCAuto for TBSM* on page 42.

To define the TBSM event rules, you must configure your TBSM Database Server. See the *IBM Tivoli Business Systems Manager (TBSM) Administration Guide* for instructions on defining event rules.

## Troubleshooting

The following sections contain common issues and workarounds for SCAuto for TBSM. For the most up to date troubleshooting information, see the Peregrine Customer Support Web Site and search the knowledge base.

You can find troubleshooting information for the following topics:

- *Changing the automatic close event polling interval* on page 62
- *Changing the automatic close event process time limit* on page 63
- *Changing the SCAuto host or port values after installation* on page 64
- *Enabling debugging features* on page 65
- *Error message: License check failed* on page 66
- *Error message: query timed out* on page 66

## Changing the automatic close event polling interval

### Problem

You want to change the amount of time that SCAuto for TBSM waits between polling ServiceCenter for closed incidents. You can optimize this interval to match your expected number of closed tickets.

### Workaround

Edit the SCAuto for TBSM configuration file for Automatic Ticket Closure `SCTBSMEvNotify.ini`.

**To change the automatic close event polling interval:**

- 1 Verify that the TBSM console is not running.
- 2 Open the configuration file in a text editor.

By default, the `SCTBSMEvNotify.ini` configuration file is in the following folder:

`C:\TivoliManager\Data\Peregrine`

- 3 Add the following line to the end of the file:

```
ev_notify_interval:<seconds>
```

For *<seconds>*, type the number of seconds you want SCAuto for TBSM to wait before polling ServiceCenter for closed incidents. The default interval is 120 seconds.

- 4 Save the configuration file.

## Changing the automatic close event process time limit

### Problem

You want to change the amount of time that SCAuto for TBSM waits for the TBSM event notification application to complete processing a closed problem ticket. SCAuto for TBSM stops the in progress TBSM event notification application process after this time interval has elapsed. You can set this time limit to take into account your expected network latency and ServiceCenter CPU usage.

### Workaround

Edit the SCAuto for TBSM configuration file for Automatic Ticket Closure `SCTBSMEvNotify.ini`.

**To change the automatic close event process time limit:**

- 1 Verify that the TBSM console is not running.
- 2 Open the configuration file in a text editor.

By default, the `SCTBSMEvNotify.ini` configuration file is in the following folder:

`C:\TivoliManager\Data\Peregrine`

- 3 Add the following line to the end of the file:

```
max_processtime:<seconds>
```

For *<seconds>*, type the number of seconds you want SCAuto for TBSM to wait for the TBSM event notification application to complete processing a closed problem ticket. The default value is thirty seconds for each closed problem ticket.

- 4 Save the configuration file.

## Changing the SCAuto host or port values after installation

### Problem

You want to change the host name or communications port that SCAuto for TBSM uses to connect to ServiceCenter. You can change these values without having to reinstall SCAuto for TBSM.

### Workaround

The SCAuto for TBSM setup wizard saves the host name and communications port number information in three different configuration files:

- **SCTBSMAuto.ini** – configuration file for SCAuto for TBSM Automatic Problem Ticketing
- **SCTBSMProb.ini** – configuration file for SCAuto for TBSM Manual Problem Ticketing
- **SCTBSMEvNotify.ini** – configuration file for SCAuto for TBSM Automatic Ticket Closure

**To change the host name or communications port SCAuto for TBSM uses:**

- 1 Verify that the TBSM console is not running.
- 2 Open the configuration file in a text editor.  
By default, all configuration files are in the following folder:  
`C:\TivoliManager\Data\Peregrine`
- 3 To change the ServiceCenter host name look for the following entry:  
server:
- 4 Type the new server name you want to use after the colon.
- 5 To change the ServiceCenter communications port look for the following entry:  
port:
- 6 Type the new communications port number you want to use after the colon.
- 7 Save the configuration file.
- 8 Repeat steps 2 through 7 for each configuration file.



## Enabling debugging features

### Problem

You want to see detailed information in the SCAuto for TBSM log files and see the events created in the ServiceCenter eventout queue. You can use the debugging feature to troubleshoot custom mappings or verify that you have properly configured ServiceCenter.

### Workaround

Edit the SCAuto for TBSM configuration files to add debugging parameters:

- **SCTBSMAuto.ini** – configuration file for SCAuto for TBSM Automatic Problem Ticketing
- **SCTBSMProb.ini** – configuration file for SCAuto for TBSM Manual Problem Ticketing
- **SCTBSMEvNotify.ini** – configuration file for SCAuto for TBSM Automatic Ticket Closure

#### To enable debugging features:

- 1 Verify that the TBSM console is not running.
- 2 Open the configuration file in a text editor.

By default, all configuration files are in the following folder:

**C:\TivoliManager\Data\Peregrine**

- 3 Add the following line to the end of the file:

```
debug:<log level>
```

For *<log level>*, type the value 0, 1, 2, or 3. Level 3 is the most verbose log level that contains all available errors, warnings, and information. Level 0 turns off debugging mode.

- 4 Add the following line to the end of the file:

```
delete_events:0
```

A value of 1 deletes events from the ServiceCenter eventout queue. A value of 0 prevents SCAuto for TBSM from deleting events from the ServiceCenter eventout queue.

---

**Important:** You can only set this configuration setting for the **SCTBSMAuto.ini** and **SCTBSMProb.ini** configuration files.

---

- 5 Save the configuration file.
- 6 Repeat steps 2 through 5 for each configuration file that you want to enable debugging.

---

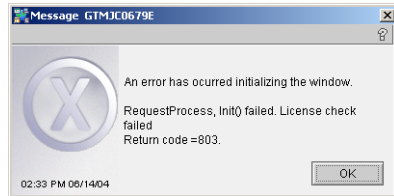
**Important:** Disable the debugging parameters before returning SCAuto for TBSM to a production environment.

---

## Error message: License check failed

### Problem

TBSM displays a license check failed error message when you attempt to log in to the TBSM console.



### Workaround

SCAuto for TBSM 1.0 requires an SCAuto SDK license to run with ServiceCenter versions 5.1.2 and earlier and ServiceCenter 6.0. Install the SCAuto SDK license for these versions of ServiceCenter. For ServiceCenter versions 5.1.3 and later and ServiceCenter 6.1, there will be a dedicated license for the SCAuto for TBSM integration to ServiceCenter.

Contact Peregrine Customer Support for information on acquiring an SCAuto SDK license.

## Error message: query timed out

### Problem

The log file displays a query timed out error message and several failed retry attempts. The TBSM console does not display the proper problem ticket data.

## Workaround

This error message can result from network latency or from high CPU usage on the server running ServiceCenter. If you see this error outside of these conditions, you may want to increase the time-out values and number of retry attempts for your SCAuto for TBSM queries. You can change these values from the SCAuto for TBSM configuration files:

- **SCTBSMAuto.ini** – configuration file for SCAuto for TBSM Automatic Problem Ticketing
- **SCTBSMProb.ini** – configuration file for SCAuto for TBSM Manual Problem Ticketing
- **SCTBSMEvNotify.ini** – configuration file for SCAuto for TBSM Automatic Ticket Closure

Use the following instructions to change the time-out values and number of retry attempts.

### To change the time out value and number of retry attempts:

- 1 Verify that the TBSM console is not running.

- 2 Open the configuration file in a text editor.

By default, all configuration files are in the following folder:

**C:\TivoliManager\Data\Peregrine**

- 3 Add the following line to the end of the file:

```
retry_interval:<seconds>
```

For *<seconds>*, type the number of seconds you want SCAuto for TBSM to wait before attempting to submit ServiceCenter queries again. The default value is three seconds.

- 4 Add the following line to the end of the file:

```
query_numofretry:<attempts>
```

For *<attempts>*, type the number of ServiceCenter connection attempts you want SCAuto for TBSM to make before returning an error message. The default value is three attempts.

- 5 Save the configuration file.
- 6 Repeat steps 2 through 6 for each configuration file that you want to enable debugging.



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