

Novell[®] Connector[™]

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DBConnector Differences in Sentinel 6

Product Version(s): Requires Sentinel 6.0 or higher



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About this Guide

This manual gives you a general understanding of this Connector and the differences between this connection method in Sentinel 6 and previous versions of Sentinel. It is intended mainly for the system administrators to configure the Connector to establish connection between Collector and Event Source.

Additional Documentation

The other manuals on this product are available at the following URLs:

- <http://www.novell.com/documentation/sentinel5>
- <http://www.novell.com/documentation/sentinel6>
- <http://support.novell.com/products/sentinel/collectors.html>

The additional documentation includes:

- Sentinel User's Guide for Sentinel 6
- Database (DB) Connector Guide for Sentinel 5
- Database (DB) Connector Guide for Sentinel 6
- Documentation for individual Collectors

Documentation Conventions

The following are the conventions used in this manual:

- `ls`, `--help`: commands, options
- Go to *Start > Program Files > Control Panel* to perform this action: Multiple actions in a step
- Any references to Sentinel 5.x also apply to Sentinel 4.x. Sentinel 5.x is used for simplicity.
- For more information, refer to *Chapter Name* in *Guide Name*: This is a reference to a chapter/section in another book.

NOTE: Any important notes for the user are mentioned as a Note.

<p>Caution: A Caution indicates information that the user should read to avoid a potentially undesirable result.</p>

Introduction

Sentinel 6 includes an all-new Event Source Management framework for deploying, managing, and troubleshooting event collectors from within the Sentinel console. This framework allows for management of all event collection components from within an intuitive, graphical interface. This GUI replaces functionality previously in the Sentinel Collector Builder and provides a number of new features not available in previous versions of Sentinel.

Collectors and connectors are now created as plug-ins to Sentinel (previously, connector functionality was built into Collector Builder). Collectors and connectors are stored within a central repository in the Sentinel system and are configured and deployed through a simple, wizard based interface. Other ESM features include a collector debugger, the ability to open filters on a single data source with a single mouse click, and integrated right-click actions for analysis and management tasks such as viewing the raw data or creating a Sentinel Active View.

The addition of Event Source Management has led to some differences in how collectors are stored, managed, and deployed within Sentinel. The objective of this document is to instruct users of Sentinel 6 on how to use collectors written for Sentinel 5.x with the ODBC or JDBC connection method with the Sentinel 6 software (including the Event Source Management framework.) This document assumes familiarity with the following topics:

- Importing connectors into Sentinel 6
- Importing collectors into Sentinel 6
- Configuring parameters in Sentinel 6
- General differences between collector management in Sentinel 6 and previous versions (For more information, refer to *Using 5.x Collectors in Sentinel 6*.)

For more information about using Sentinel 6, please refer to the Sentinel User's Guide, Chapter 8 on Event Source Management.

This document focuses on the database (DB) connector and the differences between using this connection method in Sentinel 6 and previous versions. In addition to the topics above, this document assumes familiarity with the following topics:

- Creating database connections
- ODBC connections in Sentinel 5.x (For more information, refer to the documentation for any 5.x ODBC collector.)
- JDBC connections in Sentinel 5.x (For more information, refer to the documentation for any 5.x JDBC collector.)

These documents can be found at <http://support.novell.com/products/sentinel/collectors.html>

In Sentinel 6, there is an option to use ODBC or JDBC option. The JDBC connector is preferred, for reasons that are explained later in this document, but both connection types will be explained in this document.

Outdated Sections of the 5.x Documentation

Due to changes in functionality between Sentinel 5.x and Sentinel 6, the following sections of the collector documentation for collectors using the DB connection are no longer relevant:

- Port configuration
- Get Started
- Collector Prerequisites information about installing the DBconnector
- Information about setting parameters (actual parameter names and values are still valid, but the method for setting them has changed)

Collector Functionality

From an end user perspective, the general functionality of the ODBC and JDBC collectors is basically the same in Sentinel 6 and previous versions. For more information about the functionality of the collectors, refer to the 5.x documentation for that collector.

The technical implementation of the collectors has changed slightly with the release of Sentinel 6. In the past, database collectors used name value pairs to represent the data collected via ODBC or JDBC. New collectors built for Sentinel 6 use a data map instead. ODBC does not support data maps, so all new Sentinel 6 collectors will be built to use JDBC connections.

Getting Started

To get started, import the appropriate connector and collector using Event Source Management. The connector and collectors must be located in a directory that can be browsed to from the Sentinel Control Center machine.

For more information about the import process, refer to the *Event Source Management* chapter in the *Sentinel User's Guide*.

Device Configuration

The configuration of devices (in this case, the database server) for Sentinel 6 is the same as configuration of devices in Sentinel 5.x.

Collector Configuration and Operation

JDBC Collectors

For Sentinel 5.x collectors that used JDBC, the major differences in configuration are covered by the procedures in the *Sentinel User's Guide* that explain how to import a collector and connector and the procedures in the Database Connector documentation that explain how to configure the JDBC connector.

For collectors that are already deployed in your environment, you should refer to the parameters in the Sentinel 5.x collector when configuring the parameters for the Sentinel 6 collector.

In addition, please refer to the *Offset File* section below for information on how to use the existing offset file to prevent data overlap between the Sentinel 5.x system and the Sentinel 6 system. (If data overlap between the old system and the upgraded system is desirable, the database offset may be deliberately set to an older value, typically a lower row number, in order to manipulate the collector into collecting older data.)

ODBC Collectors

Collectors with ODBC as their connection method use an ODBC data source directly; there is no real connector. The DBConnector is not necessary for ODBC collectors.

To use a 5.x ODBC collector with Sentinel 6:

1. Place the ODBC collector (from 4.x or 5.x) in a location that can be browsed to from the Sentinel Control Center.
2. Create the ODBC Data Source Name, as you did for Sentinel 5.x.
3. Log into the Sentinel Control Center as a user with permission to manage Collectors.
4. Go to *Event Source Management > Live View*.

5. Use the instructions in the *Event Source Management* chapter of the *Sentinel User's Guide* to import the collector.
6. Enter the following parameters for the Collector:
 - ODBC_DSN
 - ODBC_Password (not necessary if Windows Authentication is used)
 - ODBC_Username (not necessary if Windows Authentication is used)

NOTE: If you are using Windows Authentication with ODBC, the Sentinel Service must be run as a domain user with permission to read from the source database.

Configure Parameters	
24Hour_Clock	yes
Alert_Unknown_Events	on
DB_Error_Severity	4
DB_Retry	yes
Data_Input_System_Type	windows
Default_Severity	3
Generic_RN	ODBC_RN
Generic_SN	ODBC_SN
Heartbeat_Severity	0
IP_To_Country_Mapping	off
MSSP_Customer	
Max_Rows_To_Return	200
ODBC_DSN	testJDBC
ODBC_Password	password
ODBC_Username	johnsmith
Offset_File	..\..\..\..\offset\odbc\offset.log
Pause_Seconds	30
Process_0_ReturnCode	on
PROCESS_TIMEOUT_DELAY	300

Offset_File
Enter only the filename of the Offset file. It will be in this agent directory

7. Complete the Collector configuration.
8. Start the Collector. Unlike most Sentinel 6 Collectors, no Connector or Event Source creation is necessary for ODBC Collectors.

For collectors that are already deployed in your environment, you should refer to the parameters in the Sentinel 5.x collector when configuring the parameters for the Sentinel 6 collector.

In addition, please refer to the *Offset File* section below for information on how to use the existing offset file to prevent data overlap between the Sentinel 5.x system and the Sentinel 6 system. (If data overlap between the old system and the upgraded system is desirable, the database offset may be deliberately set to an older value, typically a lower row number, in order to manipulate the collector into collecting older data.)

Offset File

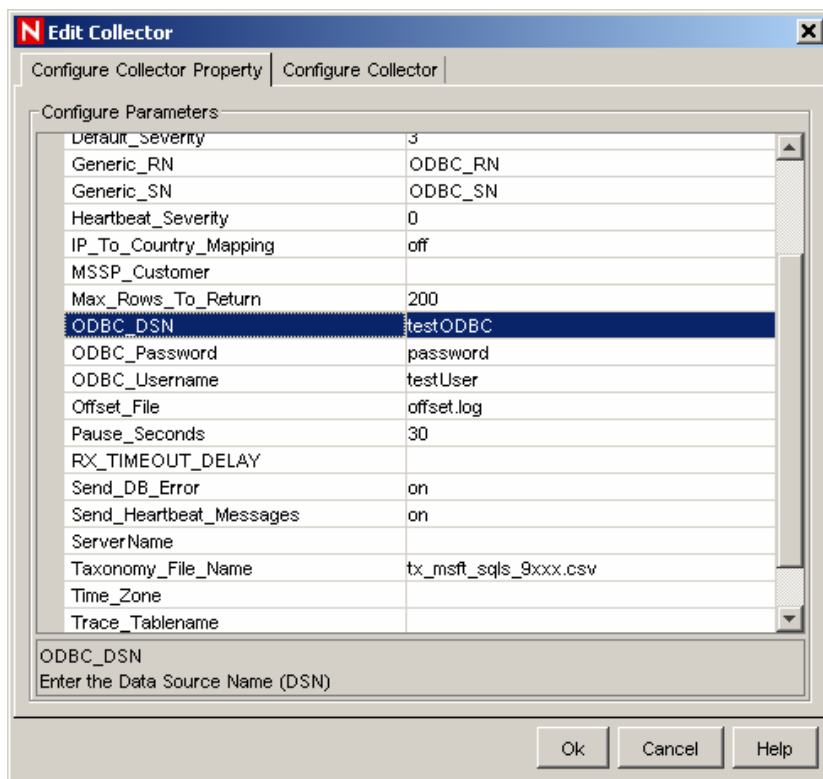
There are changes in how the offset file is configured. In Sentinel 5.x, an offset file is used to record a unique row identifier that indicates the ending point for the last database query (and the starting point for the next database query). In Sentinel 6, the unique row identifier is typically stored in the database instead.

However, it is still possible to use older Sentinel ODBC or JDBC collectors with an offset file using the procedure below. This method is very similar to the way the Sentinel 5.x ODBC and JDBC Collectors worked. Using the offset value in the existing offset file will ensure that the new Sentinel 6 system starts reading data where the Sentinel 5.x system left off.

To use a 5.x database collector with an existing offset file:

1. Create a directory to hold the offset file under %ESEC_HOME% (for Windows) or \$ESEC_HOME (for UNIX) directory. In this example, the directory is named *offset*.
2. Copy the existing offset file into the new directory or create a new file with the same value as the value in the existing offset file. The file should have a unique name (such as *collectorname_offset.log*).
3. Open the Sentinel Control Center and go to *Event Source Management*.
4. Right-click the Collector in the Event Source Management window and choose Edit.
5. On the Configure Collector Property tab, edit the *Offset_File* property with the directory name and file name for the offset file. (In Windows, you must use an escape character “/” before using the backslash “\”. For example, the value for Offset _File might be

`../\..\..\..\..\offset\collectorname_offset.log`



If you have multiple database collectors, each of them should have a corresponding offset file. Each offset file must have a different, unique name.

Special Considerations

JDBC connections are preferred to ODBC connections for several reasons:

- The JDBC connector supports raw data storage in the RxBuffer using a data map. The raw data is stored in the variable `s_raw_message`. This facilitates troubleshooting the collector.
- The JDBC connector can automatically reconnect to the database server if the connection is lost. There are a few reasons the connection might be lost – the database server might be shut down, the network connection might be lost, or the Collector Manager machine or service might be restarted. An ODBC collector would have to be manually restarted in these circumstances.
- The JDBC connector stores the database username and password in encrypted format. ODBC collectors that use SQL Authentication (rather than Windows Authentication) require storing the account name and password in clear text, as shown in the previous graphic. ODBC collectors using Windows Authentication require that the Sentinel Service be run as an account that has permission to read from the source database.
- JDBC collectors can run on Collector Managers on any supported platform. ODBC collectors can only run on Windows-based Collector Managers.

For these reasons, all new Sentinel 6 collectors will be built using JDBC connections.

Revision History

Revision 01

Initial document

June 2007