



Exporting data from Avaya IQ

Release 5.1
July 2010

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Chapter 1: Data export overview

Avaya IQ includes a read-only data export capability. This feature includes an application programming interface (API) that is implemented as a standard web service. Users can create their own custom client application and use the API to extract data from the database for reuse in various external applications, such as wallboard displays, workforce management programs, and so forth.

All data that resides in the Avaya IQ tablespaces is available for export.

Chapter 2: Integration with Avaya IQ reporting

The following topics provide information about the integration of the data export feature with the Avaya IQ reporting system and other items that feature users should understand.

Data consistency: Since the data export API is integrated with the Avaya IQ reporting feature, the data export reports share the same parameters and measures used in the standard reports. For this reason, report data obtained from data export reports is identical to the data that can be obtained from the standard real-time and historical reports.

Report design and execution: Direct specification of SQL commands is not required to use the data export feature. You use Avaya IQ Report Designer to configure your export reports and then use the API to run the export reports and send the report output out of the system.

Export refresh rates for real-time data: Real-time data export reports continue to execute until the script or program that is accessing the API is terminated.

Dedicated export server option: Customers who have extensive data export requirements can dedicate an Avaya IQ report server solely for data export operations.

Chapter 3: Access and license considerations

Access to the export report subject area is controlled by two authorization systems.

Standard data permissions

To access the appropriate set of report data, the client application or client application user must have a valid Avaya IQ user name and password. The same administration procedures used to create authentication credentials for a regular report user are also used to administer export report users.

License options

Data access for export reports is controlled by Avaya IQ licensing. Business partners who develop customer solutions need to purchase a lab machine license.

Enterprise customers can acquire one or more of the following data export options to obtain access to the report data they want to obtain:

- FEAT_CCR_HIST_DATAEXPORT: Provides access to the export reporting area that specifies all historical data.
- FEAT_CCR_REAL_DATAEXPORT: Provides access to the export reporting area that specifies:
 - Same key performance indicator measures that are used in standard real-time dashboard reports.
 - All real-time data.

Note:

Enterprise customers can use the Web License Manager tool to obtain information about the export license options that have been acquired.

Chapter 4: Supported data output formats

Data export supports production of export report outputs in either XML format or delimiter-separated text format.

Chapter 5: Data export modes

Synchronous export

The data is returned in a single message after the reporting system receives the data request from the client application. The synchronous export mode is most appropriate for real-time data sets that can be quickly executed and have high refresh rates.

Asynchronous export

The data is sent by the reporting system in one or more messages. This export mode is a three step process:

- The client application submits the data request to the reporting system and disconnects.
- The client periodically reconnects to the system and polls for the status of the request.
- When the export report is ready, the client requests data transmission in one or message segments. The client can specify a maximum size limit for message segments.

The asynchronous export mode is most appropriate for large historical data sets that execute slowly. Because the client does not maintain a continuous connection to the reporting system and data is partitioned into multiple messages, network utilization issues and firewall security issues associated with connection time-out settings can also be minimized or avoided.

Note:

You can execute the real-time and the historical data export in both Synchronous and Asynchronous modes.

Chapter 6: Custom data export reports

Data Export uses special custom reports that users create to specify the Avaya IQ report information that they want to obtain. Custom reports are developed in the Avaya IQ Report Designer feature from special templates provided in the Data Export subject area in the reporting interface.

The Data Export subject area also includes various parameter reports. Users need to execute these reports to obtain the parameters they want to use as inputs for their custom export reports.

To get more information about creating custom export reports, refer to [Standard development kit](#) on page 19.

Chapter 7: Standard development kit

The Avaya IQ product installation includes a standard development kit (SDK) for the data export API. The SDK is installed on all Avaya IQ servers. The SDK is available from the Avaya DevConnect Web site:

https://devconnect.avaya.com/public/dyn/d_dyn.jsp?fn=479

The SDK includes the following items:

- A readme file that describes export API features and functions.
- A Web Services Description Language (WSDL) installation that defines the API.
- For client implementations that use Java and Eclipse, a `.classpath` file and a `.project` file that provide information about directory locations and other configuration specifications.
- The *Data Export Programmer Guide*.
- Two different examples of API implementations, including an example based on Java and an example based on Perl with SOAP::Lite.



Note:

Personnel who use the export API to develop client applications also have the option to use other programming protocols that can interface with the data export web service.

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