



Troubleshooting InterSystems IRIS Cloud Services

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Troubleshooting InterSystems IRIS Cloud Services
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For Support questions about any InterSystems products, contact:

InterSystems Worldwide Response Center (WRC)
Tel: +1-617-621-0700
Tel: +44 (0) 844 854 2917
Email: support@InterSystems.com

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Troubleshooting InterSystems IRIS Cloud Services

This document is intended to help you resolve issues you may encounter when using the [InterSystems IRIS Cloud SQL](#) and [InterSystems IRIS Cloud IntegratedML](#) services.

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1 Using the InterSystems Cloud Services Portal

Use the web-based InterSystems Cloud Services Portal to create, explore, and use Cloud SQL and Cloud IntegratedML deployments, including creating schemas and tables using DDL, loading tables with data from your local system or AWS S3 buckets, altering tables using DML, and running queries, as well as creating, training, validating, and using predictive models based on your data. The cloud portal also provides access to other InterSystems cloud-based SaaS-model services you may have subscribed to.

The cloud portal supports your use of Cloud SQL and Cloud IntegratedML with information boxes you can display using the ⓘ icon, which explain the various control and features and link to relevant learning materials. The portal itself is documented in [InterSystems Cloud Services Portal](#).

2 Trouble executing SQL

InterSystems IRIS Cloud SQL is designed to deliver a comprehensive SQL experience on a cloud-based SaaS model. You may encounter the following issues; the former can happen when using the cloud portal or making a [programmatic connection](#), while the latter is restricted to the cloud portal.

2.1 Privileged operations

A number of [InterSystems SQL](#) commands and procedures available in InterSystems IRIS data platform require privileges that are not available in Cloud SQL and may result in the following error message when executed in the cloud portal or through a [programmatic connection](#):

```
Error executing statement: User SQLAdmin is not privileged for the operation
```

These are typically procedures that make use of lower-level platform capabilities, are relevant to non-SQL application development, or both.

2.2 Timeouts and truncated results

When using the SQL Query Tools page of the cloud portal to execute SQL, complex queries on large datasets or queries that return result sets including long text or binary fields may time out, return truncated results, or both. The SQL editor in the cloud portal is intended to support schema and table creation and browsing, data loading, and exploratory queries, and is subject to some architectural constraints on web applications. InterSystems recommends using client-side applications or tools to make [programmatic JDBC, ODBC, ADO.NET or DB-API connections](#) to your Cloud SQL deployment for more substantial SQL work involving larger data sets..

3 Trouble connecting programmatically

Cloud SQL and Cloud IntegratedML are designed to provide your applications with relational access to and manipulation of your data using [InterSystems SQL](#) and InterSystems IntegratedML. To learn how to make programmatic connections to these services using the InterSystems DB-API (Python), JDBC (Java), ADO.NET (.NET), or ODBC (C++) driver, please read [Connecting Your Application to InterSystems IRIS](#) and watch the short videos at [Connecting to InterSystems Cloud Services](#).

If you are having trouble establishing a programmatic connection to Cloud SQL or CloudIntegratedML, review the following sections for help in resolving the issue.

3.1 Is your deployment is running?

In the cloud portal, select **Deployments** in the left navigation pane and identify the tile for the one you are trying to connect to. If it says **Status: Stopped**, click the tile to display the deployment's Overview page, and click the **Start** button at the top of the **Deployment Details** section.

If the deployment is not running within a minute or two, please open a ticket with the [iService helpdesk](#).

3.2 Review and modify the connection settings and parameters

To prepare to make a programmatic connection to your deployment, you must do the following:

- Enable external connections, either when creating the deployment or later.
- Add the originating IP address of the connection to the list of allowed address ranges, or allow all IP addresses by removing the listed ranges if any.
- Encrypt your connection using TLS (strongly recommended and the default) or allow unencrypted connections (for testing and development purposes only).
- Determine the correct hostname, port number, namespace, and credentials.

If one of these is not correct, you may see errors such as the following; each is preceded by a client driver identifier such as `[InterSystems IRIS JDBC]`:

- `Communication link failure: host-string.elb.us-east-1.amazonaws.com`
External connections are not enabled.
Hostname is incorrect.
- `Communication link failure: Connection timed out: connect`
IP address at which the connection is originates is not within any of the allowed address ranges.
Connection is not encrypted using TLS as required.
Port number is incorrect.
- `Communication link failure: Socket is closed/Communication link failure: Cannot find the file specified /path/SSLConfig.properties`
The TLS configuration is incorrect.
The correct certificate is not specified.
- `Communication link failure: Access Denied`
Namespace, credentials, or both are incorrect.

To make any required settings changes and verify the needed information, open the cloud portal, select **Deployments** in the left navigation pane, and click the tile for the one you want to connect to. On the Overview page, scroll down to **External Connections**.

3.2.1 Are external connections enabled?

If **Status** is **disabled**, enable external connections by clicking the **Update** button below and to the right, selecting **Enable external connections**, and clicking **Save**.

3.2.2 Is the IP address allowed to connect?

If no IP address ranges are listed under **Allowed IP address ranges**, connections can originate at any IP address.

However, if at least one IP address range are listed under **Allowed IP address ranges**, the IP address at which the connection originates must fall within an allowed range. If it does not, either add a range containing the address or remove all ranges to allow all IP addresses.

3.2.3 Is TLS encryption required?

If **Unencrypted connections** are **not allowed** (strongly recommended and the default), do one of the following

- If you are attempting to make an encrypted connection that is failing:
 - Use the **Get self-signed certificate** icon to download a self-signed certificate from the deployment.
 - Review the TLS procedure for the [DB-API](#), [JDBC](#), [ADO.NET](#), or [ODBC](#) driver (as appropriate) in *Connecting Your Application to InterSystems IRIS* and the comprehensive TLS configuration instructions in the [TLS Guide](#), and correct your TLS configuration or connection code as needed.
- To allow unencrypted connections for testing and development, click the **Update** button, select **Allow unencrypted connections**, and click **Save**.

3.2.4 Are the connection parameters correct?

Review the connection parameters shown under **Connection details** — **Hostname**, **Port**, **Namespace**, and **Username** — and correct the connection code in your application as needed. (You cannot obtain the password, which was set when the deployment was created, from the portal but it can be changed, if you can provide it, by using the **Change password** button.)

4 Getting help

If your resolve issue has not been resolved by the information in this document, please open a ticket with the [iService helpdesk](#).