

Administration Center - Settings - CSS and Measurement settings

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This panel is only visible in **Console 2.x**.

Settings

^ CSS and Measurement settings

SETTINGS

[ADD DATABASE CONNECTION](#)

Database Connection	CSS	Measurement		
UBUNTU2004:2282/postgres	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>		
WIN10TEST:2284/postgres	<input checked="" type="checkbox"/>	<input type="radio"/>		

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Measurement schema name

[OPTIMIZE](#) [SAVE](#)

This panel governs the **CAST Storage Service/PostgreSQL instances** that are made available to your Node instances for **Analysis/snapshot schema** and **Measurement schema storage requirements**.

Database connection list

This table lists all the **CAST Storage Service/PostgreSQL instances** that are available to your Node instances:

Database connection	The CAST Storage Service/PostgreSQL instance displayed in the format: HOSTNAME:port/database_name .
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CSS

When ticked, the **CAST Storage Service/PostgreSQL** instance is made available for **Application Analysis/snapshot schema storage**. As such, when you [add a new Application](#) in Console, you will be offered this instance (and any others that are ticked) as storage:

Add application

Application Name *

Domain Name

CSS Server

192.168.200.107:2285/postgres

UBUNTU2004:2282/postgres

Manage Version History *i*

CANCEL ADD

You can tick any number of instances, but you must always keep at least one instance ticked so that when new Applications are added, a **CAST Storage Service/PostgreSQL** instance can be assigned to that Application.

i Making any changes requires that you use the **Save** button to save the changes.




Measurement

The Measurement column indicates which **CAST Storage Service/PostgreSQL** instance will be used to host the Measurement schema for consolidating your snapshot data for use in the Health Dashboard. The column uses a "radio" button configuration, ensuring that at least one instance is selected. Only one instance can host the Measurement schema.

If you would like to change the instance used to store the Measurement schema you can do so - however, be aware of the **impacts**:

- Changing the target CAST Storage Service/PostgreSQL instance will cause a new Measurement Service schema (with the name specified in the **Measurement Schema name** field) to be created on the new target CAST Storage Service/PostgreSQL instance the next time a snapshot is generated via Console. This new Measurement Service schema will then be used for all future actions where data is uploaded to the Measurement schema. Remember that any snapshot data stored in any previously used Measurement Service schema will no longer be available in the Health Dashboard - however the schema will continue to exist on the CAST Storage Service/PostgreSQL instance.
- Changing the CAST Storage Service/PostgreSQL instance requires no manual changes for embedded Dashboards in **Console 2.x**.

i Making any changes requires that you use the **Save** button to save the changes.

	<p>Allows you to view/edit the connection settings for the selected CAST Storage Service/PostgreSQL instance. If you make any changes, any applications assigned to this instance will all start to use the new connection settings:</p> <div data-bbox="305 205 1205 961" style="border: 1px solid black; padding: 10px;"><h3>Edit database connection</h3><table><tr><td>Host</td><td>Port</td></tr><tr><td>UBUNTU2004</td><td>2282</td></tr><tr><td>Username</td><td>Password</td></tr><tr><td>operator</td><td>.....</td></tr><tr><td>Database name</td><td></td></tr><tr><td>postgres</td><td></td></tr></table><p><input type="checkbox"/> Use SSL</p><p> This will update connection profile for all the applications that use this connection</p><p style="text-align: right;">CANCEL SAVE</p></div>	Host	Port	UBUNTU2004	2282	Username	Password	operator	Database name		postgres	
Host	Port												
UBUNTU2004	2282												
Username	Password												
operator												
Database name													
postgres													
	<p>Removes the selected CAST Storage Service/PostgreSQL instance - the instance will then no longer be available. If the instance has already been used for either Analysis/snapshot schema or Measurement schema storage requirements, or if the instance is currently the only one that is active, then the icon will be greyed out and the instance cannot be deleted.</p>												

Add database connection

This option allows you to add in a new **CAST Storage Service/PostgreSQL** instance that are made available to your Node instances for **Analysis /snapshot schema** and **Measurement schema storage requirements**:

Add database connection

Host Port

Username Password

Database name

Use SSL

CANCEL ADD

Host	The hostname/IP address of the target CAST Storage Service/PostgreSQL instance. This instance can either be installed on a local machine or remote machine (network access required).				
Port	The port number of the target CAST Storage Service/PostgreSQL instance. Use the following ports for specific CAST Storage Service releases: <table border="1" style="margin: 5px 0;"> <tr> <td>CAST Storage Service 3</td> <td>2282</td> </tr> <tr> <td>CAST Storage Service 4</td> <td>2284</td> </tr> </table>	CAST Storage Service 3	2282	CAST Storage Service 4	2284
CAST Storage Service 3	2282				
CAST Storage Service 4	2284				
Username /Password	The credentials for the target CAST Storage Service/PostgreSQL instance. The default credentials for CAST Storage Service instances are: operator/CastAIP .				
Database name	The database name on your target CAST Storage Service/PostgreSQL instance. By default, postgres will be populated, however, if you are using AIP Core 8.3.40 and wish to store your schemas in a custom database (i.e. not the postgres database) enter the name of the custom database.				
Use SSL	Tick this option if your target CAST Storage Service/PostgreSQL instance is running in SSL encrypted mode. See SSL encrypted mode configuration for CAST Storage Service and PostgreSQL .				

Measurement schema name

Name of the Measurement Service schema. By default this is set to **general_measure**. Authorized characters for the name are as follows:

- 0-9
- A-Z
- _ (underscore)

A validation process is actioned and any unauthorized characters, such as -, # or \$ will be rejected.

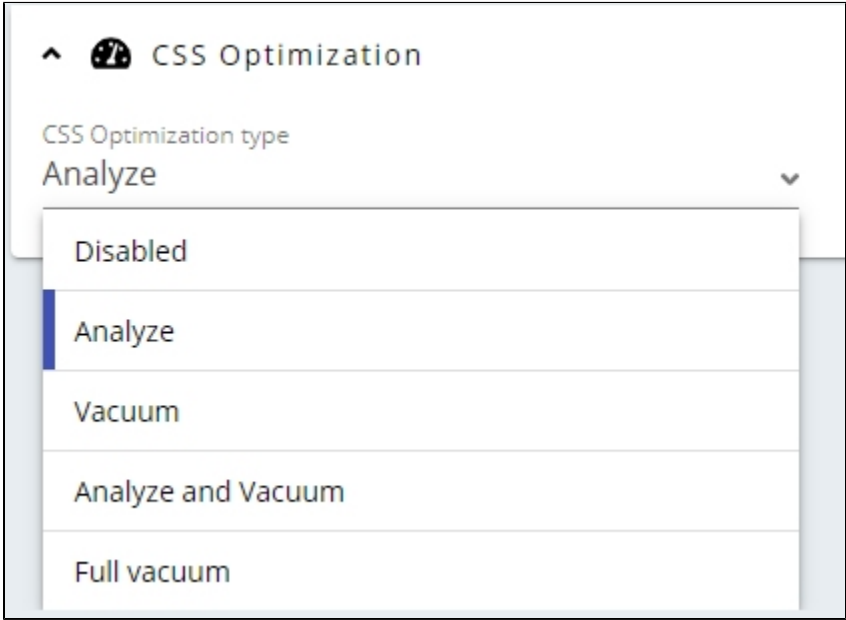
i If you would like to change the name of the Measurement schema you can do so - however, be aware of the **impacts**:

- Changing the Measurement schema name will cause a new Measurement schema (with the name specified in the **Measurement Schema name** field) to be created on the target CAST Storage Service/PostgreSQL instance the next time a snapshot is generated via Console. This new Measurement Service schema will then be used for all future actions where data is uploaded to the Measurement schema. Remember that any snapshot data stored in any previously used Measurement Service schema will no longer be available in the Health Dashboard - however the schema will continue to exist on the CAST Storage Service/PostgreSQL instance.
- Changing the Measurement schema name requires no manual changes for embedded Dashboards in **Console 2.x**.

Optimize/Save

<p>Optimize</p>	<p>Over time and through continued use, the efficiency of your Measurement schema may well start to degrade ("gaps" in table data, inefficient indexes etc.) - this degradation can significantly impact performance with the most visible impact seen in the performance of the CAST Dashboards. To counter this, CAST provides a feature (known as CsxOptimize) that can be run manually to optimize the Measurement schema stored in your CAST Storage Service/PostgreSQL instance - i.e. to clean up defects that have appeared over time. Click the button and choose the action you require. The optimization action will run immediately:</p> <div data-bbox="263 279 617 663" style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center; background-color: #e0e0e0; padding: 2px 10px; border: 1px solid #ccc;">⌂ OPTIMIZE</p> <p>Analyze</p> <p style="background-color: #e0e0e0; padding: 2px 10px; border: 1px solid #ccc;">Vacuum</p> <p>Analyze and Vacuum</p> <p>Full vacuum</p> </div> <div data-bbox="263 688 1482 869" style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <p>i</p> <ul style="list-style-type: none"> You can find a full explanation of each action in Administration Center - Settings - CSS Optimization. By default, Console will run an automatic optimization of the Measurement schemas using the Analyze action (this action can be changed/disabled - see Administration Center - Settings - CSS Optimization) immediately on completion of a data upload to the Measure schema. </div>
<p>Save</p>	<p>Any change made in this panel (Database connections/Measurement schema names) must be saved using the Save button. Changes are not applied until the button is clicked.</p>

CSS Optimization



Over time and through continued use, the efficiency of your Application's schemas may well start to degrade ("gaps" in table data, inefficient indexes etc.) - this degradation can significantly impact performance with the most visible impact seen in the performance of the CAST Dashboards. To counter this, CAST provides a feature (known as CsxOptimize) that can be run to optimize the schemas stored in your CAST Storage Service/PostgreSQL instance - i.e. to clean up defects that have appeared over time.

The CsxOptimize tool can perform various different optimization actions, all of which are standard PostgreSQL actions:

<p>Disabled</p>	<p>This option disables all automatic optimization actions. Only for use when troubleshooting - otherwise not recommended since this can have a significant impact on performance of CAST Dashboards.</p>
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Analyze (default action)	See https://www.postgresql.org/docs/current/sql-analyze.html for more information on the actions performed.
Vacuum	See https://www.postgresql.org/docs/current/sql-analyze.html for more information on the actions performed.
Analyze and Vacuum	
Full Vacuum	

This tool is run **automatically** with the default **Analyze** action in the following situations:

- immediately on completion of a **snapshot**
- immediately on completion of a **data upload to the Measurement schema**

If you would like to **change the default action** (for example change to Analyze and Vacuum, or to disable the action entirely), choose the option you require in the drop down list.



The optimize actions can also be run **manually**:

- via the Console GUI:
 - See the section **Settings** above (for the Measurement schema in v. 2.x)
 - [Administration Center - Settings - Measurement](#) (for the Measurement schema in v. 1.x)
 - [Administration Center - Applications](#) (for the Application schemas)
- using command line tools:
 - [Maintenance activities for CAST Storage Service and PostgreSQL](#)



Backups

If you would like to create a backup of the Measurement schema, click the **Backup Measurement** button as highlighted below. This will perform an immediate backup of the Measurement schema and list it in the table below:

BACKUP MEASUREMENT

Name	Date ↑	Size	
2019-12-19	2019-12-19, 16:21:17	1.82 MB	

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Name	<p>Name of the backup - this can be chosen when you click the Backup Measurement button. The default is YYYY-MM-DD:</p> <div data-bbox="253 184 1203 674" style="border: 1px solid black; padding: 10px;"> <p>Backup Measurement</p> <p>Name *</p> <p>2019-12-19</p> <hr/> <p>Please note that you cannot make any action on any application when the backup is in progress.</p> <p>Are you sure you want to proceed ?</p> <p style="text-align: right;"> CANCEL BACKUP </p> </div>
Date	<p>Date the backup was performed.</p>
Size	<p>Total size of the backup.</p>
	<p>Download the backup. The backup will be downloaded as a ZIP file containing a .cssbackup file. This can be restored using the CAST Storage Service tools. Measurement backups are physically stored on Nodes. When the backup is run, the least "busy" Node will be used to store the backup file in the following location. By default, this location is set to use the "backup" folder defined for the Nodes - see Configure AIP Node storage folder locations - optional - v. 1.x for more information.</p> <div data-bbox="253 968 1484 1041" style="border: 1px solid #ccc; padding: 5px;"> <pre>%PROGRAMDATA%\AipConsole\AipNode\backup\measurements\YYYY-MM-DD.zip</pre> </div>
	<p>Deletes the backup from Console. This process cannot be reversed.</p>