

OVERVIEW

This overview covers the *Custom Settings* (Core Package) which control instrumentation. One can override the custom settings (User or Profile) at runtime. Some settings are turned on for analysis.

Caching can play an important part of your Transactional Lifecycle of which *Force Instrumenter* attempts to utilize.

CUSTOM SETTINGS

By default, there are no custom settings defined for a specific Profile or User. We do this intentionally because every client is different. Initially, it is recommended that the following settings are used when you first get started.

▼ Default Organization Level Value			
Location	Test Application	Async Publish Events	✓
Cache Partition Name	BLSWDomainProgramCache	Caching On	✓
Code Generation Version	v57.0	Evaluate Performance On	✓
Event Batch Size	1,000	Handler Extension Finder On	✓
Is Event Sourcing	✓	Is Performance Metrics On	✓
Is Tracing	✓	Logger Class	ApexPublishEventLogger
Query Context		Send To Log	✓
Test class extension	Test	Tooling Named Credential	ToolingCallbackNC
Turn Triggers Off	<input type="checkbox"/>		

Setting	Value	Comment	Recommended
Cache Partition Name	Set to at least 1M. If you have more space to provide then 3M	Partition used to cache values, if caching is turned on. Improves performance of Queries and Responses	Yes
Code Generation Version	v57.0	Version of Apex, if creating code in Tooling Package	
Event Batch Size	1000	Used for Batch Size by the Scheduler	
Is Event Sourcing	True (checked)	Used to publish execution of events (instrumentation). Allows the ability to Replay	Yes
Is Tracing	True (checked)	Turns on Logging/Tracing of information (i.e. <i>blsw.ApplicationTracer</i>); as we do NOT use <code>system.debug()</code>	[Only for Testing]
Query Context		Future Consideration	

Setting	Value	Comment	Recommended
Test class extensions	Test	When Tooling Package creates a Test Class (i.e., MyClassTest). Some clients use _Test , which would create MyClass_Test)	Yes
Turn Triggers Off	False (unchecked)	If you a bulk loading and do not want triggers associate with CQS to run.	
Async Publish Events	True (checked)	Events are published asynchronously; and later writing into the Event Source Object (blsw__Event_Source__c)	Yes
Caching On	True (checked)	Is caching used to save queries and results	Yes
Evaluate Performance On	True (checked)	Return metrics (<i>IResult</i>) back from a CQS call. Used to look at metrics immediately from a call. Generally, used for testing	[Only for Testing]
Handler Extension Finder On	True (checked)	CQRS Pattern uses Handlers to process a Command, Query or Service following the pattern of <i>Handler</i> as the extension. For example, <i>MyCommand</i> , will have a handler, <i>MyCommandHandler</i> . The system will automatically look for the handler without specifying one for a Command, Query of Service.	Yes
Is Performance Metrics On	True (checked)	If you want performance metrics when you run a Command, Query or Service, this is required. Otherwise, there are no metrics. For example, without this turned on the Graphic engine for Charts, Tiles, Realtime Plotting, will have no data to show.	Yes
Logger Class	blsw.ApexPublishEventLogger	Uses an Asynchronous Logger to publish and save log messages (see <i>blsw. ApplicationTracer</i>)	Yes
Send to Log	True (checked)	Sends to the Logger	
Tooling Named Credential	ToolingCallbackNC	Required to used Tooling Package . This allows saving, running and processing Unit Tests and CQS features. Please note, if you already	

Setting	Value	Comment	Recommended
		have a Name Credential with access to your (<i>Sandbox</i> <i>Scratch</i>) Org, then use that one. This is NOT to be used in Production!	

Custom Setting
BSW Application Configuration [Help for this Page](#)

If the custom setting is a list, click **New** to add a new set of data. For example, if your application had a setting for country codes, each set might include the country's name and dialing code.

If the custom setting is a hierarchy, you can add data for the user, profile, or organization level. For example, you may want different values to display depending on whether a specific user is running the app, a specific profile, or just a general user.

[Edit](#) [Delete](#)

▼ Default Organization Level Value

Location	Test Application	Async Publish Events	<input checked="" type="checkbox"/>
Cache Partition Name	BLSWDomainProgramCache	Caching On	<input checked="" type="checkbox"/>
Code Generation Version	v57.0	Evaluate Performance On	<input checked="" type="checkbox"/>
Event Batch Size	1,000	Handler Extension Finder On	<input checked="" type="checkbox"/>
Is Event Sourcing	<input checked="" type="checkbox"/>	Is Performance Metrics On	<input checked="" type="checkbox"/>
Is Tracing	<input checked="" type="checkbox"/>	Logger Class	ApexPublishEventLogger
Query Context		Send To Log	<input checked="" type="checkbox"/>
Test class extension	Test	Tooling Named Credential	ToolingCallbackNC
Turn Triggers Off	<input type="checkbox"/>		

COMMENTARY

Most of the Custom Setting can be turned off once you have validated performance and overall metrics. Force-Instrumenter was designed to be performant, however, capturing metrics and publishing events provide added overhead. It is recommended that you use these options sparingly in Production. Only turn on when you want to take a snapshot or want to look at Realtime metrics.

CACHE SETTING

Caching is a critical component to improve performance; though, it is not mandatory. *Force Instrumenter* Repository classes and DB Manager will use cache when available. This helps avoid common requests.

Force Instrumenter uses a cache partition, `BLSWDomainProgramCache`. This partition reads/writes to the Org Cache (not session). The amount of cache varies from client to client. We recommend a setting of 2M. During development and testing observe the usage of cache (see [Turn of Cache Diagnostics of Test User](#)).



Platform Cache Partition

[Help for this Page](#)

Platform cache partitions let you segment the org's available cache space. Each partition's capacity is managed independently.

Request temporary Platform Cache trial capacity. Once your trial request is approved, you can allocate capacity to partitions. The maximum number of trial requests is 10 and orgs must wait 90 days between requests.



KB | MB

Recalculate

New Platform Cache Partition									
Action	Namespace Prefix	Name	Label	Default Partition	Allocated Capacity	Created By	Created Date	Last Modified By	Last Modified Date
Edit Del	blsw	BLSWDomainProgramCache	BLSWDomainProgramCache	<input type="checkbox"/>	2	UUser	8/19/2023, 6:44 PM	UUser	8/19/2023, 6:44 PM

TURN OF CACHE DIAGNOSTICS OF TEST USER

Go to Setup->Users-><Test-User> and turn on *Cache Diagnostics*.

Setup

Home

Object Manager

Users

Permission Set Groups

Permission Sets

Profiles

Public Groups

Queues

Roles

User Management Settings

Users

Manager

Receive Approval Request Emails

Federation ID

App Registration: One-Time Password Authenticator

App Registration: Salesforce Authenticator

Security Key (U2F or WebAuthn)

Lightning Login

Temporary Verification Code (Expires in 1 to 24 Hours)

Only if I am an approver

[Connect]

[Connect]

[Enroll]

[Generate]

Load Lightning Pages While Scrolling

Send Apex Warning Emails

Salesforce CRM Content User

Receive Salesforce CRM Content Email Alerts

Receive Salesforce CRM Content Alerts as Daily Digest

Make Setup My Default Landing Page

Quick Access Menu

Development Mode

Show View State in Development Mode

Cache Diagnostics

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After which, you can go into Platform Cache of *Force Instrumenter* and look at Cache Diagnostics

SETUP





Platform Cache

▼ Details





Namespace Prefix	blsw
Label	BLSWDomainProgramCache
Name	BLSWDomainProgramCache
Default Partition 	<input type="checkbox"/>
Description	

▼ Capacity (MB)

Session Cache Allocation




Organization 	0
Provider Free 	0
Total 	0
Diagnostics	

Org Cache Allocation

Organization 	2
Provider Free 	0
Total 	2
Diagnostics	

Select to view Cache Diagnostics

Total Allocation

Organization 	2
Provider Free 	0
Total 	2