



FEBRUARY 4, 2016

LEANSWIFT ECONNECT 15.3 PERFORMANCE TEST REPORT

JAGADEESAN P.D
QA LEAD



Contents

1.0 Introduction:	2
2.0 Environment Configuration	2
2.1 Terms used in doc	2
2.2 Precondition	3
2.3 Testing approach	3
3.0 Order creation and synchronization	4
4.0 Inventory synchronization (Cron)	6
5.0 Real time price synchronization	7
6.0 Order History	8
7.0 Real time inventory sync	9
8.0 Summary of performance test	10

1.0 Introduction:

This document contains details of eConnect performance test that is done as part of LeanSwift eConnect 15.3 testing. eConnect 15.3 has performance related fix in connector and Magento side which has improved the performance of key eConnect functionality like

- Order Creation & synchronization.
- Inventory synchronization (Cron).
- Real time price synchronization.
- Order History (Cron).
- Real time inventory synchronization.

2.0 Environment Configuration

<i>Environment</i>	<i>Configuration</i>
<u>Magento eConnect 15.3</u>	8 GB RAM 2 Cores 6.5 Units(ECU) 32 GB SSD
<u>Magento eConnect 15.2</u>	8 GB RAM 2 Cores 6.5 Units(ECU) 32 GB SSD
<i>Connector</i>	2 core @2.5 GHz CPU 8GB RAM 3GB allocated for Java Normal memory usage of java - around 2GB
M3 environment	Demo environment configuration.
Internet speed	8 to 10 Mbps

2.1 Terms used in doc

- Test data - Test data term refers to total count of data used for testing.
- Batch size - Indicates the total count of items that is sent as request from magento to connector.
- API transaction involved – Indicates if the connector request to M3 involves API calls.
- SQL transaction involved – Indicates if the connector request to M3 involves SQL calls.

2.2 Precondition

- 15.3 connector is installed in separate environment from that of magento environment.
- 15.2 connector and 15.2 magento environment are installed in the same environment.
- The environment set up used for performance testing is not the exact customer environment hence the performance time may increase or decrease depending on customer environment set up.

2.3 Testing approach

- Performance time in report are represented in **minutes**.
- Performance test is done manually and time is calculated from logs and using stop watch.
- All the functionalities under test works fine

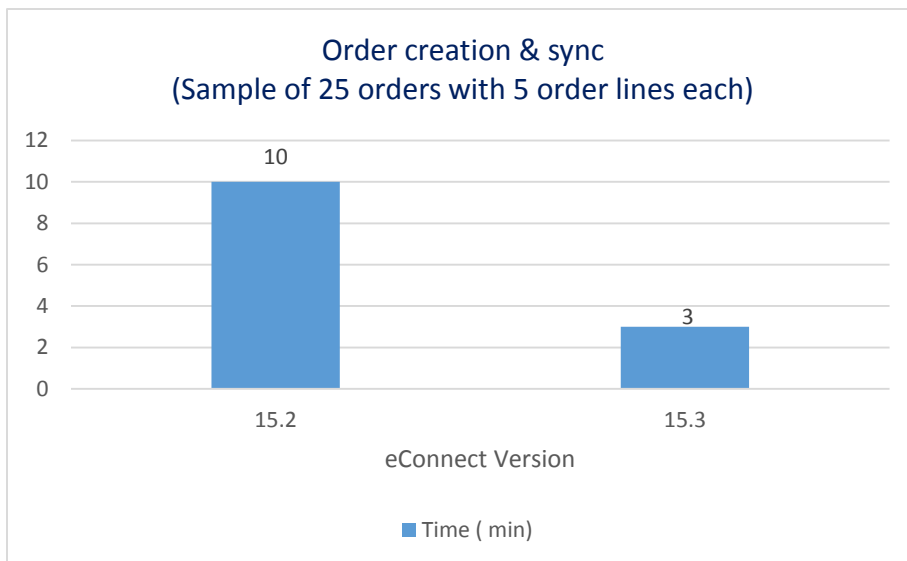
3.0 Order creation and synchronization

This section contains details of order creation and synchronization performance test. Performance test data used for evaluation is 25 orders which has 5 order lines each. Evaluation of performance time is done in 15.2 and 15.3 eConnect.

Test data	25 orders with 5 order lines each
Batch size	10
Is API transaction involved?	Yes
Is SQL query used?	No

Performance analysis of 15.2 vs 15.3:

eConnect Version	Time (minutes)
15.2	10
15.3	3



- Order creation and synchronization in 15.3 is 70% faster than 15.2.

Observation:

- Also as part of order creation load testing scenario of 25 orders with 100 order lines each are simulated in 15.3 environment and system does not break.
- All the shipment and invoice are updated properly when the status is synced.

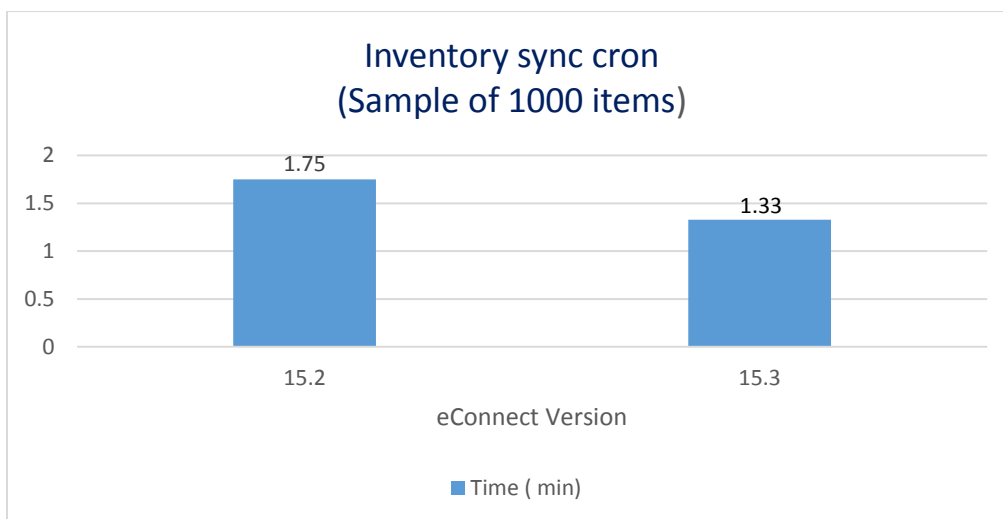
4.0 Inventory synchronization (Cron)

This section contains details of inventory synchronization via cron (leanswift_update stock) performance test. Performance test data used for evaluation is 1000 simple items. Evaluation of performance time is done in 15.2 and 15.3 eConnect.

Test data	1000 simple products
Batch size	200
Is API transaction involved?	No
Is SQL query used?	Yes

Performance analysis of 15.2 vs 15.3:

eConnect Version	Time (min)
15.2	1.75
15.3	1.33



- Inventory sync via cron in 15.3 is 31.25% faster than 15.2.

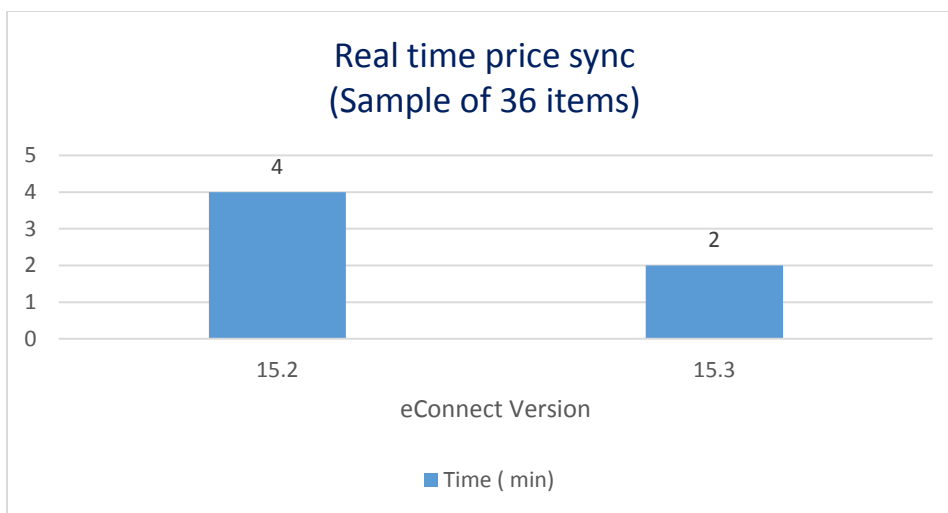
5.0 Real time price synchronization

This section contains details of real time price sync performance test. Performance test data used for evaluation is 36 simple items. Our environment has limitation of showing up maximum of 36 items in a page. Real time inventory sync works in a way when search page loads calls are made real time to M3 for the loaded search results. Evaluation of performance time is done in 15.2 and 15.3 eConnect.

Test data	36 simple products
Batch size	No batch size set
Is API Transaction involved?	Yes
Is SQL query used?	No

Performance analysis of 15.2 vs 15.3:

eConnect Version	Time (min)
15.2	4
15.3	2



- Real time price sync is 50% faster in 15.3 when compared to 15.2.

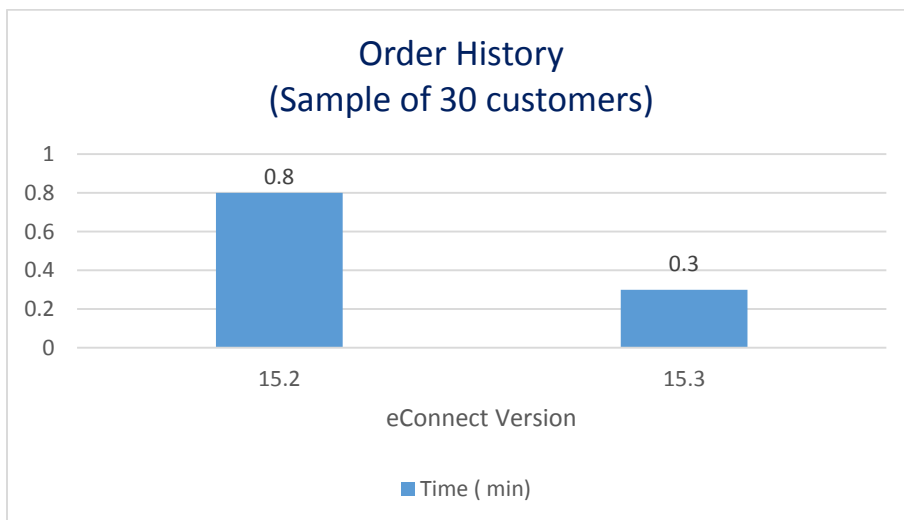
6.0 Order History

This section contains details of Order history performance test. Performance test data used for evaluation is environment with 30 customers. Evaluation of performance time is done in 15.2 and 15.3 eConnect. Transaction for order history works in a way that one customer is called per request.

Test data	30 Customer
Batch size	No batch size set
Is API transaction involved?	Yes
Is SQL query used?	No

Performance analysis of 15.2 vs 15.3:

eConnect Version	Time (min)
15.2	0.8
15.3	0.3



- Order history is 62% faster in 15.3 when compared to 15.2.

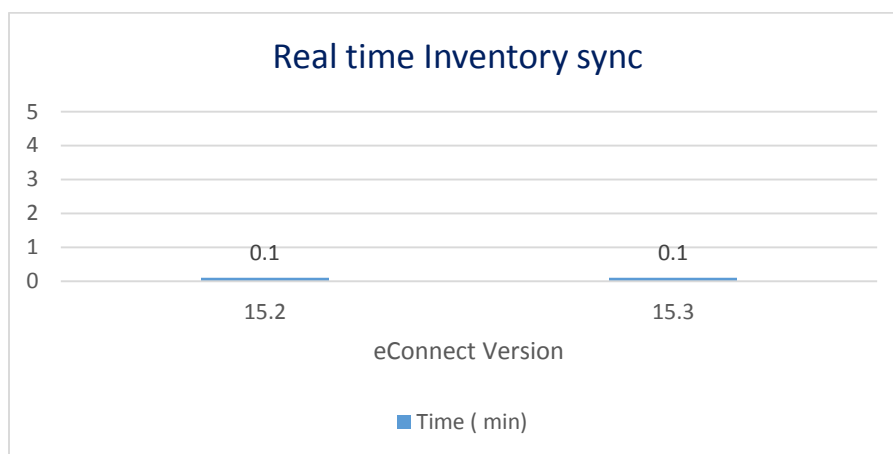
7.0 Real time inventory sync

This section contains details of real time inventory sync performance test. Evaluation of performance time is done in 15.2 and 15.3 eConnect. Transaction for real time inventory sync works in sync works in such a way that when product detail /Add to cart /Check out page is loaded real time call is made to M3.

Test data	1 simple products
Batch size	No batch size set
Is API Transaction involved?	Yes
Is SQL query used?	No

Performance analysis of 15.2 vs 15.3:

eConnect Version	Time (min)
15.2	0.1
15.3	0.1



- Real time inventory sync in 15.2 and 15.3 are same. There are no performance improvement seen.

8.0 Summary of performance test

- Order creation and synchronization in 15.3 is 70% faster than 15.2.
- Inventory sync via cron in 15.3 is 31.25% faster than 15.2.
- Real time price sync is 50% faster in 15.3 when compared to 15.2.
- Order history is 62% faster in 15.3 when compared to 15.2.
- Real time inventory sync in 15.2 and 15.3 are same. There are no performance improvement seen.

