



WWKS 2

Storage System Operator

User Guide

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User Guide

Updates

Hardware, software, and procedures are updated constantly; information on these updates will be incorporated in future versions of this manual. Make sure you use the latest version of the manual.

Manufacturer

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Service

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Important Notes

- The instruction manual is part of the product. Make sure that the instruction manual is accessible to every operator of the product at any time.
- Read the instruction manual carefully before using the product: Follow all warnings and notices to operate the product in a safe, appropriate, and reliable way.

Liability Limitations

The manufacturer accepts no liability for damages caused by:

- unsuitable or improper use
- unauthorized/incorrect installation or commissioning by the operating company or a third party
- subsequent modifications by the operator or a third party
- natural wear and tear
- negligent or incorrect handling
- non-observance of the instruction manual
- unsuitable operating materials
- deployment of untrained operators
- use of non-approved spare parts

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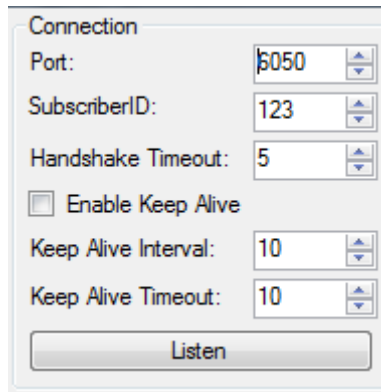
1 Introduction

This document details how to use the Storage Simulator to test a Wwks2.0 communication.

For details about the Wwks2.0 protocol, please review related documentation.

2 Simulator Setup

2.1 Connection



Connection

Port: 6050

SubscriberID: 123

Handshake Timeout: 5

☐ Enable Keep Alive

Keep Alive Interval: 10

Keep Alive Timeout: 10

Listen

Figure 1: Connection

Port: TCP port where the simulator will be listening.



SubscriberID: Used for initialization message.

Handshake Timeout: Time in seconds to send a HelloRequest after a connection is established.

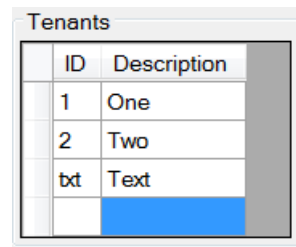
Enable Keep Alive: If enabled, the simulator will automatically send keep alive request.

Keep Alive Interval: Interval in seconds to send keep alive messages.

Keep Alive Timeout: Time in seconds to receive a keep alive response. Otherwise the connection will be closed.

-  *When you start listening, the simulator will save these settings and reload it when the simulator is restarted.*
-  *Changing Enable Keep Alive, Keep Alive Interval or Keep Alive Timeout when the simulator is listening will have an immediate effect since the listening is automatically restarted.*

2.2 Tenants




ID	Description
1	One
2	Two
txt	Text

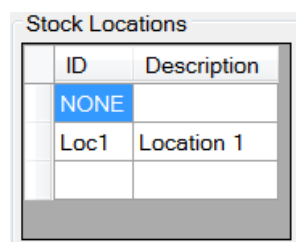
Figure 2: Tenants

Tenants must be setup before the connection is set to listen.

You need to setup the ID you want to use and a description.

 *Tenants are optional; you do not need to setup any, if you are not using multi-tenancy.*

2.3 Stock Locations




ID	Description
NONE	
Loc1	Location 1

Figure 3: Stock Locations

Stock Locations must be setup before the connection is set to listen.

You need to setup the ID you want to use and a description.

 *Stock Locations are optional; you do not need to setup any. By default, they will be 'none' location that is the default for any input.*

2.4 Simulator State

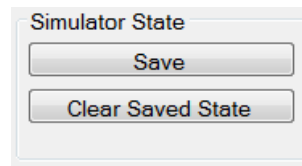


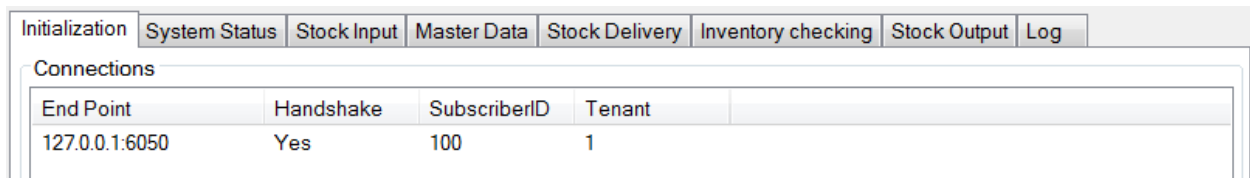
Figure 4: Simulator State

Save: Will save the 'Tenant', 'Stock Location', 'Stock', 'Master data' and 'Stock delivery'. This saved information will be automatically reloaded next time the simulator is restarted.

Clear Saved State: Will delete the save file. It will not affect the current stock, tenant ..., but next time you restart the simulator all saved state will be reset (saved connection information will not be reset).

3 Simulate WWKS2

3.1 Initialization



End Point	Handshake	SubscriberID	Tenant
127.0.0.1:6050	Yes	100	1

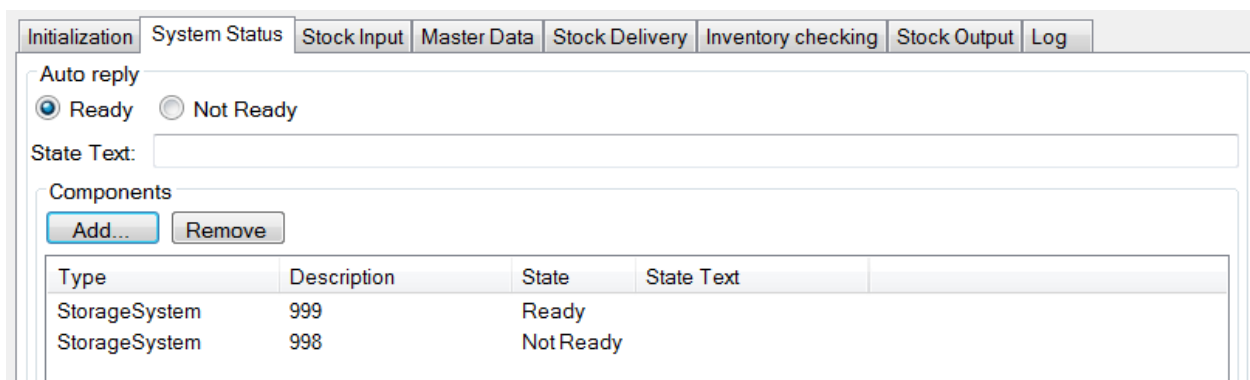
Figure 5: Initialization

Page information: The **Initialization** page allows you to see the connected client and the information related to these clients.

Message information: Once connected to the socket, you have to send a HelloRequest message to properly handshake the connection.

The handshake must complete within the handshake period, otherwise the connection will be closed.

3.2 System Status



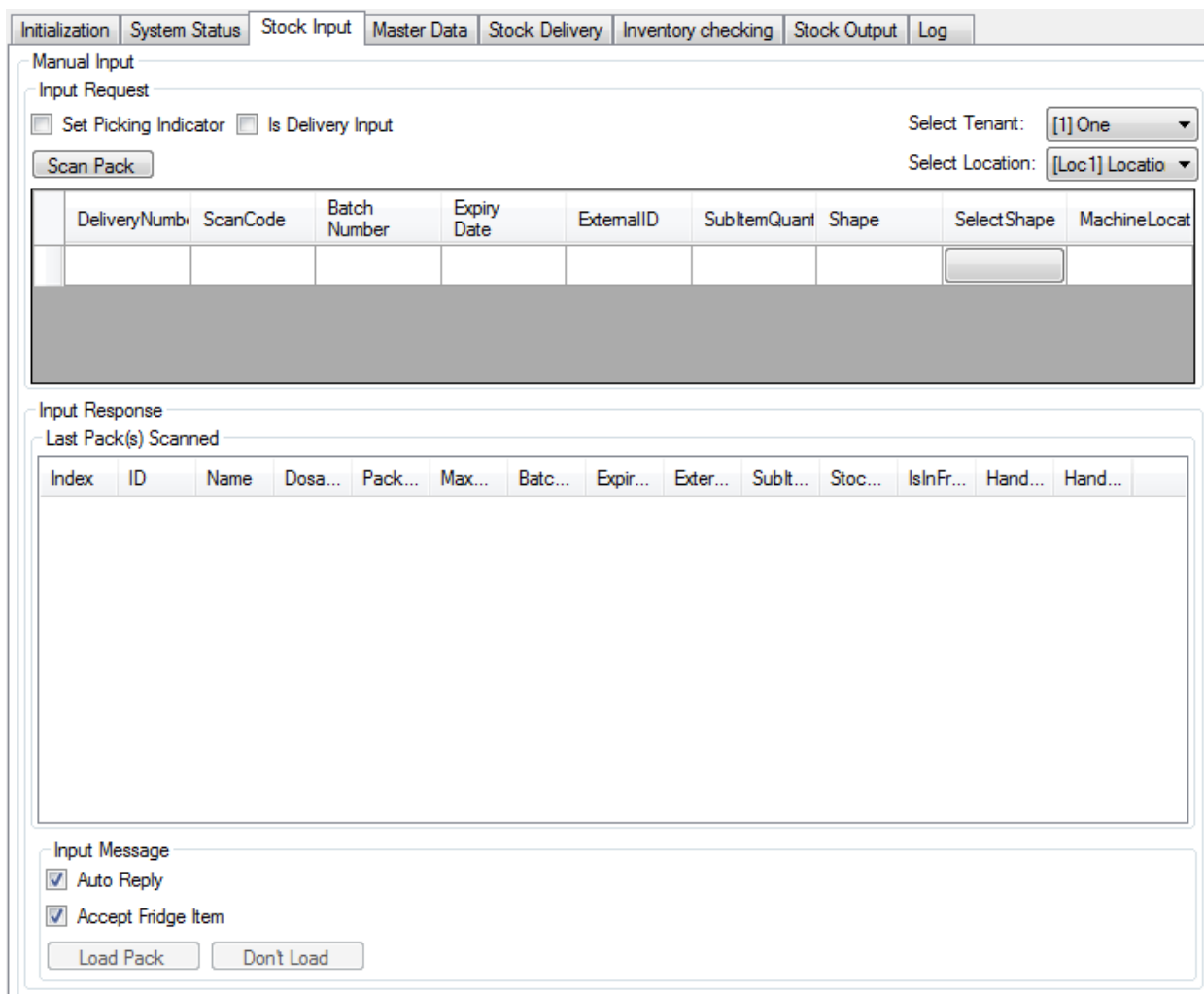
Type	Description	State	State Text
StorageSystem	999	Ready	
StorageSystem	998	Not Ready	

Figure 6: System Status

Page information: The **System Status** page allows you to setup the automatic reply to StatusRequest. Keep the following in mind: the overall ("main") status of the machine is only displayed as **not ready**, if all corresponding components are in status **not ready**. The simulator will not enforce that.

Message information:

- System Status request can only be received by the simulator, not sent.
- The Simulator will automatically reply to any status request with the setting above.



3.4 Master Data

Initialization
System Status
Stock Input
Master Data
Stock Delivery
Inventory checking
Stock Output
Log

Auto reply
☒ Accept ☐ Reject
Result Text:

Default values for Input.
Batch Number: Sub Item Quantity: Select Tenant:
External ID: Machine Location: Select Location:
Expiry Date:

Master Article List

Load Pack	Code	Name	Dosage Form	Packaging Unit	MaxSubItem	MachineLoca	StockLocatic	TenantID
<input type="button" value="Load Pack"/>	09284708	QUETIAPIN BETA 200M...		50 ST	0			
<input type="button" value="Load Pack"/>	09231209	DONEPEZIL HCL BETA1...		98 ST	0			
<input type="button" value="Load Pack"/>	09231132	DONEPEZIL HCL BETA ...		56 ST	0			
<input type="button" value="Load Pack"/>	09289870	CANDESARTAN ACTAV ...		28 ST	0			
<input type="button" value="Load Pack"/>	09284766	QUETIAPIN BETA 300M...		50 ST	0			
<input type="button" value="Load Pack"/>	09231089	DONEPEZIL HCL BETA ...		56 ST	0			
<input type="button" value="Load Pack"/>	05534120	DOXAZOSIN 4 TABLET...		100 ST	0			
<input type="button" value="Load Pack"/>	00748862	LEVO C AL 200/50 TABL...		100 ST	0			
<input type="button" value="Load Pack"/>	01035911	TOXOGONIN AMPULLE...		5X1 ML	0			
<input type="button" value="Load Pack"/>	01073975	BIOCH 11 SILIC D6 TAB ...		80 ST	0			
<input type="button" value="Load Pack"/>	00586069	VIAGRA 25MG FILMTAB...		4 ST	0			
<input type="button" value="Load Pack"/>	05535214	ITRACONAZOL NORISP...		14 ST	0			
<input type="button" value="Load Pack"/>	00190130	TORASEMID ACTAVIS 5...		100 ST	0			
<input type="button" value="Load Pack"/>	02681323	TRIMIDURA 100MG FIL...		50 ST	0			

Figure 8: Master Data

Page information: This page allows you to set the reply behave to ArticleMasterSetRequest.

The button **Load Pack** allows loading a pack in the stock. Setup the pack information (batch number, sub item quantity, ...) before you load the pack.

3.5 Stock Delivery

DeliveryNumber	State	Complete
Delivery 1	InProcess	<input type="button" value="Complete"/>
Delivery 2	Completed	<input type="button" value="Complete"/>

Load Pack	RequestedQuantity	ProcessedQuantity	ArticleCode	Name	Dosage Form	Packaging Unit	MaxSub
<input type="button" value="Load Pack"/>	1	1	3				0

Figure 9: Stock Delivery

Page information: This page allows you to set the reply behavior to StockDeliverySetRequest. The page also shows the last received deliveries and allows loading packs.

The button **Complete** changes the state of a delivery to **Completed** if all packs have been loaded or to **Incomplete** if some packs are missing.

The button **Load Pack** loads one pack in stock. You cannot load more packs than requested. (Set requested quantity to 0 to be able to load an unlimited amount of packs)

Message information: When a message is StockDeliverySetRequest:

- Any new delivery is added to the 'expected' deliveries from the simulator.
- Any delivery information received that matches the delivery number of a 'completed' delivery, will simply be added to the list.
- Any delivery information received that matches the delivery number of a 'queued' or 'in progress' delivery, will result in an update of the existing delivery.

3.6 Inventory checking

Initialization	System Status	Stock Input	Master Data	Stock Delivery	Inventory checking	Stock Output	Log
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Stock Level

Code	Name	DosageForm	PackagingUnit	MaxSubItemQu	PackCount
123	Article-123	DOS	PAK	0	5
3				0	1
1				0	3

Output pack	Delete Pack	ID	BatchNumber	ExternalID	ExpiryDate	SubItemQuant	Depth	Height
<input type="button" value="Output pack"/>	<input type="button" value="Delete Pack"/>	0	Batch-123	External-123	07/10/2016	0	0	0
<input type="button" value="Output pack"/>	<input type="button" value="Delete Pack"/>	1	Batch-123	External-123	07/10/2016	0	0	0
<input type="button" value="Output pack"/>	<input type="button" value="Delete Pack"/>	2	Batch-123	External-123	07/10/2016	0	0	0
<input type="button" value="Output pack"/>	<input type="button" value="Delete Pack"/>	3	Batch-123	External-123	07/10/2016	0	0	0
<input type="button" value="Output pack"/>	<input type="button" value="Delete Pack"/>	4	Batch-123	External-123	07/10/2016	0	0	0

Figure 10: Inventory checking

Page information: This page shows the actual stock. This will change as you load / dispense packs.

The button **Output pack**, will create an output job to dispense this pack. The pack will disappear once the output job is completed. An OutputMessage will be sent once the output job is completed.

The button **Delete Pack** will delete the selected pack from the stock. This is only to allow simulation of stock errors and does not reflect any behaviours of a real storage system.

3.7 Stock Output

Initialization
System Status
Stock Input
Master Data
Stock Delivery
Inventory checking
Stock Output
Log

Output Reply
☒ Auto-Reply
☒ Generate Box Id

Output Result
☒ Always Complete
☐ Always Incomplete
☐ According to Stock (frozen stock)
☐ According to Stock (updates stock)

Output requested

Orders

ID	Priority	Output	Point	Box	State	Tenant ID
111	3	1	0		Completed	
112	3	1	0	1	Completed	
114	3	1	0	987654321	Completed	

Order Items

Index	Article	Batch	ExternalID	ExpiryDate	PackID	RequestedQ	RequestedSut
0	1				0	1	0

Dispensed Packs

Index	Article	Batch	ExternalID	PackID	StockOutputO	StockOutputO	ComponentID
1	1				0	0	0

Figure 11: Stock Output

Page information: This page shows the received output request.

Output request will be automatically completed 5 seconds after being received.

Auto-Reply: Enable OutputMessage to be sent. This allows you to test how to handle missing OutputMessage.

Generate Box Id: This will generate a box ID for every output request.

Output result:

- **Always Complete:** Any output request will always end-up with a successful output.
- **Always Incomplete:** Any output request will always end-up with an incomplete output.
- **According to Stock (frozen stock):** The output will complete according to stock, dispensed pack information will match packs in stock, but the stock of the simulator will not change.
- **According to Stock (updates stock):** The output will complete according to stock, dispensed pack information will match packs in stock. The stock of the simulator is updated.

