

IMPLEMENTATION GUIDE for suppliers using Machine-to-Machine (M2M) connection



BoostAero XML and CSV Implementation Guideline Technical connection and integration

Version: 4.0 Date: December 2016

Document available in English (only)



Author

Name	Function	Responsibility	
Mario Kischporski	SupplyOn AG, Project Team	Implementation Guide initial	
Georg Büxel	SupplyOn AG, Project Team	Message Format/Interface Specifications/Guidelines (for BoostAero XML V2.10), explanations, sample files, Scheduler and Message Monitor screens	
Aysel Kirisgil	SupplyOn AG, Technical EDI Consultant	Maintenance, until September 2011	
Saskia Rewitzer	SupplyOn AG, Product Development SCM Aerospace	Maintenance, since October 2011	
Nils Gross	SupplyOn AG, Product Development SCM Aerospace	Maintenance	

Document History

Version	Release date	Description of Version
0.1 - 0.5	2010	Template and initial content
0.6 - 0.9	Q1 2011	Message formats, Interface specifications, explanations, sample files and scheduler added
1.0	June 2011	Release on website
2.0	November 2011	Major update: Layout update Downtimes added
2.1	24.01.2012	Change in 4.1.4 SupplyOn AS2 parameters and settings: Multiple Attachments: enabled
3.0	09.03.2012	Integration of the CSV format description into the Boost XML guide
3.1	April 2012	Harmonization of AS2 subjects. Change in chapter 7, error handling. Change in chapter 6.1. Added DATETIME format information Change in chapter 9. Added information regarding messages sizes and limitations, automatic stop and time zones Changed chapter 4.3.1. – BA XML default subjects
3.2	May 2012	Change in chapter 4.1.4 – AS2/MDN signature requirement corrected Change in chapter 4.1.5.3 – Screenshots updated
3.3	July 2012	Added chapter 10.3 Partner acts as seller and buyer
3.4	September 2012	Adjusted description in chapter 9.2.5, scheduler option "only new" for Purchase Orders.
3.5 February 2013		4.1.4 Added trusted certificate information for BoostAeroSpace members



3.6	March 2013	9.2.5 Added missing Order Status "Partially Received" and "Rejected" to Scheduler (SSW)	
3.7	January 2014	5.5 Added information about the Indentation suppression / "Pretty print" option	
3.8	June 2014	 5.5 Pretty print format options – Update 6.2 CSV encoding specification – Update 8.2.1.2 Phase 2 Added information for provision of test data 9.2.3 Message Scheduler Overview Customer Group specific configuration 9.2.7 Message Scheduler Details – Stock Information Chapter update – Information about new filter options for goods receipt messages 	
3.9	September 2015	7 Routing/Syntax check & error handling – Update 9.2 Message Scheduler – Update regarding e-mail notficiations	
т. 0		authorities in chapter 4.1.4 and 4.1.5.	



List of abbreviations

AS2	Applicability Statement 2 (= specification for data exchange)
ASN	Advance Shipping Notification
BIC	Business Integration Conversion (the conversion module of the BIS executing the message conversion/translation into another format)
BIS	SEEBURGER Business Information Server (SupplyOn's EDI messaging system software)
BIS TPM	BIS Trading Partner Management (e.g. SupplyOn's configuration of all AS2 communication partners within the BIS)
СР	Control Point
CRLF	Carriage Return Line Feed
CSV	Comma or (Semi) Colon Separated Values (Message Format)
EAI	Enterprise Application Integration (system)
EDI	Electronic Data Interchange
EDIINT AS2	Electronic Data Interchange Internet Integration – Applicability Statement 2
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secure (encryption vs. HTTP via SSL)
IMO	Inventory Monitor
M2M	Machine-to-Machine connection
MDN	Message Disposition Notification
SB	Self Billing
SCM	Supply Chain Management
SO	SupplyOn
SSL	Secure Socket Layer
VMI	Vendor Managed Inventory
XML	Extended Markup Language
XSD	XML Schema Definition (definition of the structure for XML documents)

SUPPLY (N)

Table of content

1	Purpose of the document7				
2	AirS	upply - Shared aerospace SCM platform by SupplyOn	7		
3	Mes	sage Types	8		
4	Con	nmunication type	12		
	4.1	AS2 via Internet (HTTPS)	12		
	4.1.1	Technical process of the communication	12		
	4.1.2	2 Message Disposition Notification (MDN)	13		
	4.1.3	B Preconditions for AS2 communication	13		
	4.1.4	SupplyOn AS2 parameters and settings	13		
	4.1.5	5 AirSupply M2M Certificate Overview	16		
	4.2	Shared EAI systems	18		
	4.3	Message (type) and AS2 subject	18		
	4.3.1	AS2 subjects for BoostAero XML	18		
	4.3.2	2 AS2 subjects for CSV	18		
5	Воо	stAero XML V2.10 message format and message types	20		
	5.1	General message rules	20		
	5.2	BoostAero XML V2.10 general message rules	20		
	5.3	BoostAero XML V2.10 message types	21		
	5.4	BoostAero XML V2.10 message format guidelines	21		
	5.5	BoostAero XML V2.10 pretty print format options	21		
6	CSV	message format and message types	22		
	6.1	General message rules	22		
	6.2	CSV general message rules and message structure	22		
	6.3	CSV message types	22		
	6.4	CSV message format guidelines	23		
7	Rou	ting/Syntax check & error handling	23		
	7.1	Error handling for Despatch Advice	23		
	7.1.1	Past and Future integration handling	23		
	7.1.2	2 Recommendation for fault clearance	24		
	7.1.3	3 Change on special process "First KIT delivery"	24		
	7.2	Generic error codes for all message types	24		
	7.3	Error codes for Supply Notification / VMI_Planned Receipt	25		
	7.4 7.5	Error codes for Order Response / OrderConfirmation	25		
	7.5 7.6	Error codes for Demand Forecast Response / Demand Forecast Confirmation	20 27		
0	л.0 МЭМ	Line codes for Despatch Advice / Despatch Advice	21		
0			31 24		
	0.1		21		
	0.1. 8.1.0	Massaga sizas	31		
	82	Message Scheduler	32		
	821		32		
	8.2 2	2 Automatic Stop	32		
	8.2.3	3 Overview	33		
	8.2.4	Message Scheduler Details - 10 Forecast / Demand Forecast	37		
	8.2.5	5 Message Scheduler Details Display - 20 PO / Order	38		
	8.2.6	Message Scheduler Details - 40 VMI_GrossDemands / VMI Demand Forecast	45		
	8.2.7	Message Scheduler Details Display – Stock Information	47		
	8.2.8	Message Scheduler Details – 46 VMI Monitor / Inventory Forecast	50		
	8.2.9	Message Scheduler Details - 50 SBI / Self Billing	51		



	8.3	Message Monitor 52		
9	Add	ditior	nal Important Information	54
	9.1	Dov	vntimes	54
	9.1.	1	Scheduled Downtimes	54
	9.1.	2	Unscheduled Downtimes	54
	9.1.	3	Transmissions within downtimes	54
	9.2	File	size limitations	55
	9.2.	1	Upload file types	55
	9.2.	2	Download file types	55
	9.3	Pari	tner acts as seller and buyer	55



1 Purpose of the document

This document functions as an Implementation Guide for suppliers to connect to the new shared European aerospace Supply Chain Management (SCM) Platform via a Machine-to-Machine (M2M) - also known as EDI - connection. The Implementation Guide includes both technical details and general information for high-level (business) context in order to provide suppliers with all necessary information. M2M/EDI with the SCM Platform means EDI from/to a supplier to/from the SCM application. There is no direct EDI connection or direct message flow between a supplier and its customer without the SCM application.

2 AirSupply - Shared aerospace SCM platform by SupplyOn

SupplyOn, a globally leading provider of web-based solutions for Supply Chain Management (SCM) in the manufacturing industry, has been commissioned by Airbus Group to set up a platform to optimize logistics processes. This platform, named AirSupply, is now available to all Airbus Group divisions, as well as the entire European aerospace industry. It forms the basis for standardized, efficient SCM processes in the industry, and is supporting the cooperation with suppliers and making it more transparent.

To drive forward process standardization within the European aerospace industry, Airbus was cooperating in this project within Airbus Group with Airbus Helicopters and Airbus Defence and Space, and across and beyond Airbus Group borders with three other important corporate groups in the industry: Dassault Aviation, Safran and Thales. The cooperation entitled BoostAeroSpace began in mid-2010. The initiative's objective was to communicate via a central aerospace SCM platform with suppliers across several levels, and to replace the individual supplier portals used.

AirSupply supports the collaborative SCM processes between customers and suppliers within the aerospace industry, and enables foresighted capacity planning, interactive fine tuning of delivery quantities and delivery dates, as well as order status tracking. All processes administered via the platform are completely integrated into the internal systems of the company using it.



3 Message Types

The following overview provides a high-level overview and introduction of the business processes that exist on the SCM Platform that are applicable to a M2M connection.

There are used different expressions of message type names in Boost XML- and CSV-format. In the description table both names are written down and marked in different colors for **BoostAero XML** and **CSV**.





#	Message Types (BoostAero XML / CSV)	Direction	Description
1	Demand Forecast / Demand Forecast Overview	To Supplier	The forecast process receives the forecast data from the ERP system and allows customers and suppliers to collaborate on forecast data. The forecast data is published by the ERP system frequently (supposed to export data once a week). The data contains of a header and a set of detail lines while the header describes the forecast in common such as customer material number, supplier ID, customer ID and the detail lines contain the demand quantities related to a demand date. The imported customer forecast data is organized in horizon types depending on the materials logistic family while each horizon is split into buckets which represent a time subset of the horizon (a week or a month). The data is organized in firm horizon, flexible horizon and provisional horizon. The firm horizon contains of all demands which are no longer subject of forecasting anymore (and are subject to be already handled by PO). The flexible horizon contains of all demands in the short term range which require a commitment of supplier. The provisional horizon contains of all demands in a long term range which do yet not require a commitment of the supplier (but is optional for supplier to edit commitment).
2	Demand Forecast Response / Demand Forecast Confirmation	From Supplier	The supplier sends forecast confirmation message to the AirSupply application. Suppliers are requested to commit the demanded quantity by editing the forecast data in field "Supplier Commitment" while customer users are required to agree on the committed supplier quantities in field "Commit Tuning". To notify either customer as well as supplier of quantity mismatches as difference between the demanded quantity and the supplier committed quantity, the system maintains exceptions which are supposed to highlight required activity in order to remove the quantity mismatches by finding an agreement between customer and supplier.
3	Order / OrderOverview	To Supplier	The purchase order process receives the PO data from the customer ERP system and allows customers and suppliers to collaborate on the PO schedule line level. By performing changes on the PO schedule line data, the customer and supplier can request changes regarding date, quantity and price, while each of this values can be enabled or disabled for collaboration on customer level. On each completed collaboration sequence, the changed data is submitted back to the ERP system. During its lifecycle the PO receives changes in its data material while all changes are submitted from ERP as order change requests and are read-only on AirSupply side. Furthermore the AirSupply PO process receives changes in logistical values for shipped and received quantities by either ASN process or by Goods Receipt process.



#	Message Types (BoostAero XML /	Direction	Description	
	CSV)			
			The logistical values influence the collaboration by (e.g.) not allowing reduction of PO schedule line quantities below the logistical values – hence PO cannot be reduced in quantity below the quantities the supplier has already shipped or the quantities the customer has already received.	
4	Order Response / OrderConfirmation	From Supplier	The supplier sends order response data to the AirSupply application. By performing changes on the PO schedule line data, the supplier can request changes regarding date, quantity and price, while collaboration on these values can be enabled or disabled on customer level and/or on schedule line level. The non changes are for the supplier read-only. The following action codes are valid: - MODIFY - REJECT - ACCEPT	
5	Despatch Advice / Despatch_Advice	From Supplier	 The Despatch advice is an electronic delivery notification sent by the supplier to the customer after goods pick-up, in order to optimize the goods receipt process. It allows to: know when the material has been dispatched or will be ready for despatch have the precise details of the shipment facilitate the good receipt process by scanning the "UX label" Reduce administrative acceptance disputes during the goods receipt because despatch advice data is checked and the supplier will be notified about errors before sending 	
6	Stock Information: Inventory Forecast, Consumption Report and Receipt Advice / VMI_Stockinformation	To Supplier	 There are two main use cases covered by the stock movement process: 1) Goods receipt notifications sent by the customer to the supplier referring to regular purchase orders. The goods receipt notification includes: received quantity cancelled quantity (to cancel a goods receipt that was entered in error) returned quantity (returned items that are poor quality, incomplete or damaged) The goods receipt information updates the state model of the purchase order in AirSupply accordingly. 2) Stock information sent by the customer to the supplier referring to articles managed by VMI. In VMI the supplier needs detailed information about the buyer's current stock levels and all corresponding movements. The notification sent by the buyer can therefore include: goods receipt information (like in the purchase order process) 	



#	Message Types Direction Description		Description
	(BoostAero XML /		
	CSV)		
			- consumptions
			 movements regarding ownership (consignment
			⇔buyer)
			 movements regarding stock type (quality
			⇔blocked ⇔free)
			 Current stock level information
			The stock movements will update the VMI module in
			AirSupply accordingly (demand netting).
7	Inventory Monitor	То	IMO (Inventory Monitor) is an aggregation of Stock Level
		Supplier	(Total stock information), Material master Data (Material
			numbers/descriptions, Min/Max, Days of Supply etc.),
			Inventory Projection (includes the projected stock, the
			demands, the unconsumed demands, the in-transits,
			planned receipts, min/max stock, and min/max delivery
			proposal and timestamps of the last demand-/stock
			updates etc. In the IMO outbound message all day time
			buckets are included with demand values or change in the
			average demand. The IMO message contains the data
		_	snown in the screen "Inventory Projection" in AirSuppiy.
8	Demand		Vendor Managed Inventory (VMI) demands or updates are
	Forecast (VMI)/	Supplier	sent to the supplier with this message type.
	VIVI_Demands	_	
9	Supply Notification /	From	The In-Transits quantities reflect the quantities contained in
	VMI_Planned Receipt	Supplier	the despatch advices the supplier already created. Any
			creation of a new despatch advice will result in an increase
			of the related in-Transit quantities. A supplier can create
			despatch advice either directly of on the basis of previously
			created planned receipts. In the latter case, the creation of
			a new despatch advice will systematically decrease the
			in the despatch advice. At the same time, the In Transit
			quantity will be increased by the same amount
10	Solf Billing /	То	Invoice data is cont to the supplier for solf billing
10	Self-Billing	10 Supplier	involce data is sent to the supplier for sell billing.
14	Beek Centrel		The measure will be cent to the complication ence of an arrest
11		10 Supelier	The message will be sent to the supplier in case of an error
	Notification	Supplier	during import of the transferred message.



4 Communication type

After registration with SupplyOn the connection to SupplyOn is set up via AS2 via HTTPS.

4.1 AS2 via Internet (HTTPS)

AS2 is a communication protocol standard for secure data transfer via the Internet. Electronic business documents of any format (e.g. CSV, BoostAero XML) can be exchanged between business partners via AS2.



4.1.1 Technical process of the communication

AS2 uses an "envelope" in which the EDI data is embedded, which then is submitted securely over the Internet. The data is transmitted with the Hypertext Transfer Protocol (HTTP), the core technology of the World Wide Web. The sender receives a digital receipt confirmation directly from the AS2 protocol, an Message Disposition Notification (MDN), with which the sender can e.g. prove a delivery on time.

An advantage and core characteristic of AS2 over other communication protocols is that with AS2 the (EDI) user is not dependent on deep technical message disposition protocols (e.g. on network level) but can use the MDN as proof in message form.

HTTPS functions as the transport protocol or layer, AS2 functions as the communication protocol or layer. Additional encryption over HTTP is done via SSL.

	AS2 Message	AS2 MDN		
HTTP header				
method	POST <host name=""></host>	POST <host name=""></host>		
AS2-to	AS2 receiver	AS2 receiver		
AS2-from	AS2 sender	AS2 sender		
AS2-subject	Message subject	Message subject		
content-type	multipart/signed	multipart/signed		
content-length	<variable></variable>	<variable></variable>		
mime declaration	<boundary></boundary>	<boundary></boundary>		
Message body				
mime declaration	<boundary></boundary>	<boundary></boundary>		
content-type	text/xml	message/disposition-notification		
content-length	<variable></variable>	<variable></variable>		
Message (xml)	message	MDN		
Message Signature				
mime declaration	<boundary></boundary>	<boundary></boundary>		
content-type	application/pkcs7-signature	application/pkcs7-signature		
content-length	<variable></variable>	<variable></variable>		
SHA1-Signature	signature	signature		



4.1.2 Message Disposition Notification (MDN)

The purpose of the MDN is to acknowledge the receipt of a payload message. An MDN contains machine-readable information on the delivery state of the payload message. E.g., it contains the message digest (MIC) of the payload message as calculated by the recipient.

All AS2-messages which were sent to and successfully **received** by SupplyOn will lead to a **synchronous** MDN. The MDN is delivered in combination with the HTTP(S) response to the HTTP(S) request that carried the payload message.

For the **outbound** direction (SupplyOn sending) it will be agreed during the integration project if the MDN should be synchronous or asynchronous.

Note: All status notification messages (see below chapter on error handling) are sent asynchronously within a new HTTP(S) session.

4.1.3 Preconditions for AS2 communication

Preconditions for the data exchange via AS2 are permanent Internet access and AS2 Drummond certified software on the supplier side which is able to handle multi MIME attachments.

Important:

Please check your AS2 Client, if the Client is able to provide the AS2 Subject in the corresponding field **"subject**".

If your AS2 Client is providing the AS2 Subject in the field **content-disposition**, please contact your AS2 Client provider to see how you can use the subject field.

SupplyOn is not able to read out the AS2 Subject from the field content-disposition.

Example: AS2-To: SOAIRSTEST AS2-From: PartnerAS2T Date: Mon, 5 Sep 2011 02:51:34 GMT Subject: DEMAND FORECAST RESPONSE Message-ID: <<u>MOKOsi106-5225328-13233e60c2e-editap01-</u> node1PartnerAS2T@editap01.us.selelectronics.com> AS2-Version: 1.2 EDIINT-Features: AS2-Reliability Disposition-Notification-To: PartnerAS2T Disposition-Notification-Options: signed-receipt-protocol=optional,pkcs7-signature;signed-receiptmicalg=optional,sha1 content-type: multipart/signed; micalg=SHA1; protocol="application/pkcs7-signature"; boundary=" =2827911803508083Sterling2827911803508083MOKO" --_=2827911803508083Sterling2827911803508083MOKO Content-type: Application/XML content-disposition: attachment; filename="DEMAND FORECAST RESPONSE" content-id: <MOKOsi155-5225326-13233e60c2e-editap01node1PartnerAS2T@editap01.us.partelectronics.com>

4.1.4 SupplyOn AS2 parameters and settings

The communication settings per supplier are done on the SupplyOn EDI messaging system side (SupplyOn uses state of the art EDI messaging system software, the SEEBURGER Business Integration Server (BIS) in version 6 with the EDIINT AS2 Drummond certified communication adapter).



On the supplier side the supplier is required to make the correct and corresponding communication settings.

For the connection and technical M2M integration you will receive the **AS2 parameter sheet** with the SupplyOn AS2 parameters alongside with this Implementation Guide. Please fill out this parameter sheet carefully and send it to <u>EDI-Connect@SupplyOn.com</u>.

The SupplyOn Server Certificates are attached to the AS2 parameter sheet.

The following settings apply to the AS2 setup to connect to SupplyOn as default. Exceptions from the default are not permitted.

Payload Signing:	enabled
Payload Encryption:	disabled
Payload Compression:	enabled, using gzip algorithm
Transmission over HTTPS:	enabled
Basic Authentication:	disabled (not required due to Certificate-based authentication)
MDN Signing:	enabled
Multiple Attachments:	enabled



AS2 Settings		Requirements	Explanation
ity			For secure HTTPS connection and AS2 signature based
			authentication trusted certificates are required. Self
			created/self signed certificates are NOT allowed.
	Communication Certificate	Trusted	Requirements for the certificates are described in chapter 4.1.5.
Secur			BoostAeroSpace members (BASM) may use X.509 certificates issued by a BASM internally operated Certificate Authority (BASM PKI) which is compliant with the requirements defined in [BASBCP].
	Digital Signature	_	Digital signature is required.
	Encryption	_	No additional encryption of the data is necessary, since the communication is already SSL encrypted (HTTPS)!
Transport Layer	Internet connection	- Permanent Internet connection - Fixed and public URL or IP address mandatory	A permanent Internet connection has to be granted.
	Transport Protocol	AS2 via secure HTTP (HTTPS)	HTTPS is a special form of the HTTP protocol offering increased security via SSL (128 Bit encryption). HTTPS is used to prevent the "observation" during the transmission of sensitive data.
Client Authentication	Basic Authentication	_	Authentication of the sending interface system during the receipt via username and password is NOT required and NOT possible. Authentication is done via signing/certificates (see Communication Certificate for certificate based authentication).
MDN	MDN	Mandatory (synchronous or asynchronous)	The MDN is an instrument for transaction security. The MDN is sent back by the recipient. It confirms the message receipt and provides proof that the correct recipient was reached, since he was in the possession of the private key. The MDN is returned synchronously.
	MDN signed	_	MDN signature is required.
	MDN encryption	-	No additional encryption of the MDN is necessary, since the communication is already SSL encrypted (HTTPS)!



4.1.5 AirSupply M2M Certificate Overview

Scope of the certificate overview is a set of recommendations when using X.509 v3 certificates for supplier authentication in Machine to Machine (M2M) communication scenarios within the AirSupply solution. M2M scenarios include communication based on the AS2 protocol as well as the HTTPS protocol. The following areas are explicitly not in scope:

- User certificates which prove the identity of supplier or customer users of the SupplyOn marketplace or their corresponding organization.
- Other SSL/TLS server-authentication, E-Mail, XML-Security, code-signing, time-stamping, VoIP, IM, Web services, etc.

4.1.5.1 General Topics

- SupplyOn will determine which CA certificates are included in M2M components on the SupplyOn marketplace, based on the benefits and risks of such inclusion to our customers.
- SupplyOn reserve the right to not include a particular CA certificate or to discontinue including a
 particular CA certificate in M2M components on the SupplyOn marketplace at any time and for
 any reason.
- SupplyOn will not allow the usage of SELF-SIGNED CERTIFICATES in PRODUCTION environments to prevent misuse due to missing certificate registration and management processes. SELF-SIGNED CERTIFICATES may be used in TEST environments without PRODUCTION data.

4.1.5.2 Generic Certificate Recommendations

All certificates used for digital identities in scope of the PRODUCTION M2M connection to the supplier should conform to the following criteria:

- The certificate is issued by one of the certificate authorities listed in chapter 4.1.5.3.
- The assurance level of the corresponding registration process must assert the holder identity to a level equal or comparable to the "Organizational Validation".
- Other certificates require that during M2M setup the fingerprint of the certificate needs to be verified by SupplyOn employee and customer contact e.g. via telephone call, in order to verify identity of customer.
- Certificate key usage must be digital signature and extended key usage must contain server and client authentication.



The following screenshot shows the key usage and extended key usage of a valid certificate.

Certificate	Certificate
General Details Certification Path	General Details Certification Path
Show: <all></all>	Show: <all></all>
Field Value	Field Value
Valid to Samstag, 8. Juni 2013 14:46:50 Subject 195.25.100.21, Public key RSA (2048 Bits) Key Usage Digital Signature, Key Encipherment (a0) Enhanced Key Usage Server Authentication (1.3.6.1.5.5.7.3.1), Thumbprint algorithm sha1 Thumbprint algorithm sha1 Thumbprint 1c e4 71 5c 7d 22 5a cd 32 c1 33 88 06 96 F III III	Subject 195.25.100.21 Public key RSA (2048 Bits) Key Usage Digital Signature, Key Encipherment (a0) Enhanced Key Usage Server Authentication (1.3.6.1.5.5.7.3.1), Thumbprint algorithm sha1 Thumbprint 1c e4 71 5c 7d 27 5a cd 32 c1 33 88 06 96 t Comparison of the server Authentication (1.3.6.1.5.5.7.3.1) Server Authentication (1.3.6.1.5.5.7.3.1) Client Authentication (1.3.6.1.5.5.7.3.2)
Edit Properties Copy to File	Edit Properties Copy to File
ОК	ОК

A self-signed certificate where certificate subject ("issued to") and issuer ("issued by") are the same are <u>NOT</u> allowed.

Certificate	Certificate
General Details Certification Path	General Details Certification Path
Certificate Information	Certification path
This CA Root certificate is not trusted. To enable trust, install this certificate in the Trusted Root Certification Authorities store.	
Issued to: 195.25.100.21	
Issued by: 195.25.100.21	View Certificate
Valid from 08. 06. 2011 to 08. 06. 2013	Certificate status:
Install Certificate Issuer Statement Learn more about Lertificates	This CA Root certificate is not trusted because it is not in the Trusted Root Certification Authorities store. Learn more about <u>certification paths</u>
ОК	ОК



4.1.5.3 Trusted Issuers (Certificate Authorities List)

The following trusted issuers have been chosen to be accepted in scope of this context:

ld.	Certificate Authority	Detail Information
1	Symantec	https://www.symantec.com/ssl-certificates
2	GeoTrust	https://www.geotrust.com/ssl/
3	Thawte	https://www.thawte.com/ssl
4	GlobalSign	https://www.globalsign.com/en/ssl

4.2 Shared EAI systems

Different supplier organizations (hence different SupplyOn customers) may use the same EAI system to transmit messages to SupplyOn. In this case the shared EAI system must ensure that each organization initiates an HTTPS session.

Therefore it is not possible to transmit messages of different organizations within one HTTPS transmission.

4.3 Message (type) and AS2 subject

A message subject is used to identify the message type (e.g. Order).

An AS2 header field named SUBJECT is mandatory to allow the identification of the transmitted message type. The content of the SUBJECT field has to be individually agreed between SupplyOn and the supplier. SupplyOn proposes the following values for the message type SUBJECT.

4.3.1 AS2 subjects for BoostAero XML

No.	Message Type	AS2 SUBJECT
1	Demand Forecast	DEMAND_FORECAST
2	Demand Forecast Response	DEMAND_FORECAST_RESPONSE
3	Order	ORDER
4	Order Response	ORDER_RESPONSE
5	Despatch Advice	DESPATCH_ADVICE
6	Stock Information: Inventory Forecast Consumption Report Receipt Advice Attention: The Stock Information message type one of the 3 AS2 statement	InventoryForecast ConsumptionReport ReceiptAdvice consists of 3 different message types. Depending on the subjects will be used.
7	Inventory Monitor	VMI_IMO_INVENTORY_FORECAST
8	Demand Forecast (VMI)	VMI_DEMAND_FORECAST
9	Supply Notification	SUPPLY_NOTIFICATION
10	Self Billing	SELF_BILLING_INVOICE
11	Back Control Message	BACK_CONTROL_MESSAGE

4.3.2 AS2 subjects for CSV

No.	Message type	AS2 SUBJECT
1	Demand Forecast Overview	ForecastOverview



2	Demand Forecast Confirmation	ForecastConfirmation
3	OrderOverview	OrdersOverview
4	OrderConfirmation	OrderConfirmation
5	Despatch_Advice	SellerASN
6	VMI_Stockinformation	StockInformation
	Attention: Depending on the settings in the Message Scheduler one of the 3 Stock Information message types will be received.	
7	Inventory Monitor	IMO
8	VMI_Demands	SellerVMIDemands
9	VMI_Planned Receipt	PlannedReceipts
10	Self-Billing	SellerSBInvoice
11	Status Notification	StatusNotification



5 BoostAero XML V2.10 message format and message types

For a supplier to connect via M2M to SupplyOn provides the option to use BoostAero XML V2.10 as a message format.

It is strongly recommended to read the document "Read Me first – BoostAero General information" first, especially if you are a BoostAero XML beginner. The document is available for download on the SupplyOn AirSupply M2M Guidelines Download Area (http://www.supplyon.com/supplyon_download_area_m2m_guidelines.html).

The Extensible Markup Language abbreviated XML, is a markup language for representing hierarchically structured data in the form of text data. XML is used for the platform-and implementation-independent exchange of data between computer systems, particularly via the Internet. An XML document consists of text characters, in the simplest case ASCII, and is human-readable.

The logical structure represents a tree structure and is organized hierarchically. As tree nodes are:

- Items whose physical award means
- a matching pair of start tag (<Tag-Name>) and end tag (</ tag name>) or may be an emptyelement tag (<Tag-Name />)
- attributes as a start-tag or empty-element tag written keyword-value pairs (attribute name = "attribute-value") for additional information about items (a kind of meta-information)
- processing instructions
- Comments (<!-- comment text ->)

XML-Schema/XSD

- XML Schema (XSD or XML Schema Definition) is the modern way, the structure of XML documents to describe. XML Schema also provides the ability to use the contents of elements and attributes to restrict, for example, on numbers, dates or text.

All BoostAero XML V2.10 files within one transmission must be of the same message type because the message type is transmitted via the AS2 subject.

5.1 General message rules

The following rules apply to all messages (if no exception is specified within the respective field description):

- Negative numbers: The minus sign must be in front of the digits (e.g. -10).
- Decimal numbers: Max. 5 decimal digits are allowed.
- Date format is CCYYMMDD.
- Time format is hhmmss.
- The currency will be described with 3 characters (e.g. EUR).

5.2 BoostAero XML V2.10 general message rules

SupplyOn uses and provides the validated BoostAero XML message format in signed off Version 2.10 as a subset of the generic BoostAero XML format. For general information or for questions regarding the generic BoostAero XML format please refer to

http://www.boostaero.com/presentation/boostaero_standard.html

Contacts:

- BoostAero International Association, c/o ASD, 270 Av. de Tervuren, B-1150 Brussels, Belgium
- Membership information : Bureau of BoostAero <u>team@boostaero.com</u>
- Technical information and assistance: Samy Scemama, <u>samy.scemama@boost-management.com</u>, (+33) 6 10 25 45 59



5.3 BoostAero XML V2.10 message types

The BoostAero XML V2.10 message types correspond 1:1 to the AS2 subject (see chapter 4.3.1 AS2 Subjects for BoostAero XML).

5.4 BoostAero XML V2.10 message format guidelines

The message format guidelines for the respective business process are provided to you separately. BoostAero XML V2.10 sample files with explanations will be provided alongside with the message format guidelines. Interface specifications are used synonymously with the term message format guideline. In this Implementation Guide and for the technical integration process the term **Message** Format Guideline is used.

5.5 BoostAero XML V2.10 pretty print format options

Only until June 1st 2014 the pretty print format is the default option for the BoostAero XML message structure, which means that the transferred messages contain indentations and linefeeds. This will be still valid for all suppliers which were connected before June 1st 2014 to the productive environment.

SupplyOn however recommends not to use the pretty print format option, because the file size of the messages (files for the transmission) without indentations and linefeeds is significantly smaller. A change regarding format option can be done easily and separately for each message type during runtime. Just send a corresponding request to <u>EDI-Connect@SupplyOn.com</u>.

After June 1st 2014 the pretty format option is not used for the XML messages by default. All Suppliers which will be connected after June 1st 2014 to the productive environment will receive therefore all BoostAero XML messages from AirSupply without indentations and line breaks.



6 CSV message format and message types

Airbus recommends the use of CSV as the message format for the M2M supplier integration.

It is a simple way for a supplier to connect via M2M to SupplyOn by offering CSV as a message format.

The CSV file format describes the structure of a text file for storage or for easy exchange of structured data. The file extension ".csv" is an acronym for Comma Separated Values.

The character encoding to use is no more defined, 7-bit ASCII is widely regarded as the lowest common denominator.

In CSV files can be tables or a list of lists of different lengths are shown within the text file, some characters have a special function to structure the data.

- A symbol is used to separate data sets. This is usually the line break of the file-generating operating system for the Windows operating system are in practice often actually two characters.
- A symbol is used to separate data fields (columns) within the records. General for the comma is used. Depending on the software involved and user preferences and semicolon, colon, tab, space or other characters are common.
- To use special characters in the data to, a text delimiters used. Normally this field delimiter is the quotation mark. "If the field delimiter itself is included in the data, it will be doubled in the data field

Alongside with this Implementation guide you will receive the message format guidelines for each of the message types.

All CSV files within one transmission must be of the same message type because the message type is transmitted via the AS2 subject.

6.1 General message rules

The following rules apply to all messages (if no exception is specified within the respective field description):

- Negative numbers: The minus sign must be in front of the digits (e.g. -10)
- Decimal numbers: Max. 5 decimal digits are allowed
- DATETIME format is CCYYMMDDHHMMSS
- DATE format is CCYYMMDD
- TIME format is hhmmss
- The currency will be described with 3 characters (e.g. EUR)

6.2 CSV general message rules and message structure

For the CSV messages the following general rules apply:

- Encoding is UTF-8
- Each record is represented by one line
- At the end of each line there is a CRLF (Carriage Return Line Feed), even if it is the last line of a file
- The first line of a file is the header line (column names)
- The delimiter character between fields is semicolon (;)
- If the field value contains a semicolon the whole value must be enveloped by quotation marks ("...")
- If the field value contains a quotation mark, it must be duplicated (""). The first character will be interpreted as escape character

6.3 CSV message types

The CSV message types correspond 1:1 to the AS2 subject (see table chapter 4.3.2 AS2 Subjects for CSV)



6.4 CSV message format guidelines

The message format guidelines for the respective business process are provided to you separately. **CSV** sample files with explanations will be provided alongside with the message format guidelines (also called interface description or specification).

In this Implementation Guide and for the technical integration process the term **Message Format Guideline** is used.

The color legend is very important for the messages that are sent from the supplier to the customer.

Content	Explanation
mandatory (M)	Fields marked with mandatory are required to fill from a technical perspective. If one of these fields is left empty, the upload record will be rejected by the Hub (<u>color</u> RED or GREEN)
optional (O)	for download: could be filled or empty in download files - depends on customer; for upload: leave unchanged, empty or modified supplier response (<u>color</u> light BLUE)
conditional (C)	Descript condition necessary (color GREEN)
Fields marked in light BLUE	Fields in BLUE are not used and should contain left with the downloaded value or empty
Fields markes in RED	Fields in RED are mandatory fields from a technical perspective. If one of these fields is left empty, the upload record will be rejected by the Hub
Fields marked in GREEN	Fields in GREEN are requested by Customer and the value submitted must respect the field size and type definitions. When the Field Name is in red, it means that the information is mandatory from a functional perspective.

7 Routing/Syntax check & error handling

In case of routing or syntax errors, a dedicated message, type Status Notification, is used. The message will be sent via AS2 to the supplier. The message contains an error code as well as a short description of the error.

7.1 Error handling for Despatch Advice

In the past, despatch advice messages were always rejected completely, no matter which error was caused.

As of release 2015 Wave 2 (scheduled 6th of December 2015) the behavior for despatch advice messages will change and allow also partial integration of despatch advices.

7.1.1 Past and Future integration handling

DA M2M Integration Handling Past and Future

Past

- · Suppliers send 1 DA with several UX
- Systems handles one DA as a transaction and rejects or imports complete transaction
- The system imports →1 DA with several UX

DA1	DA2
UX1	UX1
UE1	UE1
UE2	UE2
UX <mark>2</mark>	UX2
UE1	UE1
UE2	UE2
0	

Future (as of 6th December 2015)

- Suppliers send 1 DA with several UX
- System splits one DA into single transactions based on UX
- The system imports
 → 1 DA with 1 UX only

DA1	DA2	
UX1	UX1	
UE1	UE1	
UE2	UE2	0
DA1	DA2	
UX <mark>2</mark>	UX2	
UX <mark>2</mark> UE1	UX2 UE1	



As a consequence one single content error in only one UX will no longer block the full despatch advice but please note that routing and syntax errors will still lead to a complete rejection of the DA transmission.

7.1.2 Recommendation for fault clearance

It is highly recommended to just retransmit the erroneous UX to AirSupply after fixing the errors. If already integrated UX were resent to AirSupply it will lead to additional error messages based on a duplicate UX and UE information.

7.1.3 Change on special process "First KIT delivery"

In the past, the first despatch advice created for a KIT PO that had the flag "First Kit Delivery" set to "TRUE" must include both the KIT header and at least one of its components in one DA.

As of release 2015 Wave 2, both the KIT header and at least one of its components must be included in one UX. Its sending is forbidden if there are only components or only the header of the KIT. As the error handling is based on UX level, the system will not reject the full DA. UX not belonging to the KIT PO will be successfully imported if no other errors occur, UX belonging to a KIT PO which are missing the KIT header or are missing one related component in the first DA transmission for a first kit delivery will be rejected. Despatch advices that are created after the first KIT despatch advice has been sent, must concern only components of the KIT PO in one UX.

Error code	Error Case	Keyword	Description
R001	Routing failed	Sender ID and/or OrgCode	Sender ID and OrgCode within the message mismatch with the BIS partner name stored in the CP
R002	Routing failed	Entity not found	No entity was found in BIS TPM matching with the data from the message
R003	Routing failed	Buyer Controlpoint	No buyer CP found with the CP name given in the message
R004	Routing failed	Networklink or Supplier Number	No networklink found with the buyer CP and the sellernumber given in the message
R005	Routing failed	Seller Controlpoint	Seller CP given in the selected networklink does not exist
R006	Routing failed	Logical filename	No network communication record found at the networklink with matching logical filename
R007	Routing failed	Supply Trigger	No SupplyTrigger found in selected network communication record
R008	Routing failed	Seller Controlpoint or EDI partner	For messages sent from a sellside partner: The seller ControlPoint which was determined is not assigned to the communication partner that has sent the message
R009	Routing failed	Seller Controlpoint	For messages sent from a sellside partner: There is more than one seller ControlPoint ID determined within one transmission
S001	Syntax check failed	File structure	SupplyOn is not able to parse the file because it's not well formed or invalid regarding to the respective XSD

7.2 Generic error codes for all message types



Error code	Error Case	Keyword	Description
S002	Syntax check failed	Any mandatory field	A field defined mandatory in the interface description is missing
S003	Syntax check failed	Max. field lengths	The content of a field exceeds the max. length defined in the format description
S004	Syntax check failed	Min. field lengths	The content of a field falls below the min. length defined in the format description
S005	Syntax check failed	Field type (e.g. DATETIME)	The content of a field doesn't match the type specified in the interface description
S006	Syntax check failed	Qualifier	A code or qualifier within a field is unknown
S007	Syntax check failed	File structure	Too much repetitions for a field or segment
C001	Countercheck failed	PO or VMI reference	A business object referenced in a message doesn't exist
C002	Countercheck failed	PO or VMI reference	A newer record than the imported message already exists *
C003	Countercheck failed	PO or VMI reference	The message was already imported

7.3 Error codes for Supply Notification / VMI_Planned Receipt

Error Code	Error Case	Keyword	Description
C101	Countercheck failed	Supplier Material Number or Customer Material Number	Referenced material not found
C102	Countercheck failed	Unit of Measure	UOM code in message differs from code UOM code in material master data

7.4 Error codes for Order Response / OrderConfirmation

Error Code	Error Case	Keyword	Description
C002	Countercheck failed	PO reference or Update version	An newer record already exists at the application database
C004	Countercheck failed	PO reference	A referred PO already exists at the application database
C202	Countercheck failed	Requested quantity is below shipped quantity	
C203	Countercheck failed	Requested quantity	Requested quantity is below received quantity
C204	Countercheck failed	Requested quantity	Value exceeds min/max limits for requested quantity
C205	Countercheck failed	Requested quantity	Requested quantity is smaller than zero
C206	Countercheck failed	Requested quantity	The requested quantity value mismatches the configured format direction
C207	Invalid value	Requested date	Unqualified requested date value



Error Code	Error Case	Keyword	Description				
C208	Countercheck failed	Requested date	The requested date exceeds the agreed date				
C209	Countercheck failed	Requested date	Value exceeds min/max limits for requested date				
C210	Countercheck failed	PO status	Common collaboration failure				
C211	Countercheck failed	Collaboration Model	Collaboration failure due to collab mode restrictions				
C212	Countercheck failed	Collaboration Model	Cannot perform any changes (usually depending on collab. mode)				
C213	Countercheck failed	Collaboration Model	Change on a collab field which is not allowed for collaboration				
C214	Countercheck failed	PO status	cannot perform the requested action (on the current status of PO line)				
C215	Countercheck failed	Supplier comment	Missing comment on reject in simple mode				
C216	Countercheck failed	Supplier Acknowledgement Number	Missing supplier acknowledgment number on commit in case config. requires it				
C217	Countercheck failed	KIT PO	Kit not found/not loadable				
C218	Missing value	KIT header	Kit does not have a KIT header				
C219	Countercheck failed	KIT header	KIT contains more than one header				
C220	Missing value	KIT component	Kit does not contain any components				
C221	Countercheck failed	KIT component	At least one component cannot be adjusted to give KIT header quantity				

7.5 Error codes for Demand Forecast Response / Demand Forecast Confirmation

Error Code	Error Case	Keyword	Description
C319	Invalid data	Collaboration set	Wrong data, e.g. no matching collaboration set found
C311	Invalid structure	Position	The position is beyond the current horizon range
C312	Invalid format	Demand Quantity	The demand quantity format does not match the uom format
C313	Invalid structure	Delivery Date	The delivery date of a position is beyond the horizon/s



Error Code	Error Case	Keyword	Description					
			LIE number does not fit the					
C401	Invalid value	UE Number	customer codification rules, e.g. SSCC logic					
C451	Missing value	UX Number	UX Number is a mandatory field and has to be provided					
C402	Wrong value	Estimated Delivery Date	Estimated Delivery Date is in the past					
C406	Wrong value	Manufacture Date	Manufacture date must be inferior or equal to the current date					
C407	Wrong value	Expiry Date	Expiry date must be superior to the current date					
C408	Invalid value	Label Text	Label text can only be INCOMPLETE or URGENT/INCOMPLETE or URGENT					
C409	Invalid value	Batch Number	Batch number length must not exceed 15 characters					
C410	Missing value	Manufacturing Country	Manufacturing country needs to be declared according to the ISO 3166 two digit country codes					
C452	Missing value	Transport Document or Transport Mode or Departure Date or Estimated Delivery Date	Mandatory field from the DA header is missing					
C411	Missing value	Forwarder Name or Ship From Name or Ship From City or Ship From Country or Ship From Country code	Mandatory field from the address segment is missing					
C412	Countercheck failed	PO Status	DA cannot be created if the purchase order schedule line is in status CANCELLED, SHIPPED o RECEIVED					
C413	Missing value	Manufacturer	Manufacturer ID is missing. It must be selected from the approved manufacturer list provided in the Customer PO Schedule Line or VMI Item					
C414	Countercheck failed	Serial Number	Serial number is declared several times for the same material					
C415	Invalid value	Serial Number	Serial numbers need to be declared analogue to the shipped quantity					
C416	Missing value	Serial Number	Serial Numbers are mandatory, no serial number was declared					
C417	Invalid value	Serial Number Serial number length must r exceed 18 characters						

7.6 Error codes for **Despatch Advice / Despatch Advice**



Error Code	Error Case	Keyword	Description					
C418	Invalid value	Serial Number	Serial number contains forbidden characters					
C419	Missing value	PO reference	PO reference declared could not be found for this supplier number, plant code and customer group code					
C420	Countercheck failed	Customer Material Number or Supplier Material Number	Supplier or Customer Material Number need to match the PO					
C425	Invalid value	UE Weight UOM or UX Weight UOM	Only KG and LB are allowed as UOM					
C426	Invalid value	Shipped Quantity	Shipped quantity not in line with field definition, e.g. more than 2 decimal places					
C427	Invalid value	UE Number	UX cannot be imported due to missing UE information					
C428	Countercheck failed	"DA remaining quantity to be shipped"	In the PO the DA Remaining Quantity is equal to zero, therefore no further delivery is possible for this PO item.					
C429	Countercheck failed	PO status	Status of PO item is cancelled, received or shipped, no further delivery possible					
C430	Countercheck failed	Manufacturer	Invalid manufacturer, needs to be in line with the PO					
C431	Missing value	KIT PO	Missing KIT header					
C432	Missing value	VMI reference	VMI reference declared could not be found for this supplier number, plant code and customer group code					
C433	Invalid value	UX Number	DA does not contain any UX information					
C434	Missing value	UE Weight UOM	UE weight UOM is missing					
C438	Missing value	Despatch ID	Despatch ID is a mandatory information					
C439	Missing value	DA upload code	DA upload code is a mandatory information, for M2M value is always "SEND"					
C440	Invalid value	Transport Mode	Transport Mode can only be: RAIL, ROAD, AIR, SEA					
C441	Invalid value	UX Number	UX number does not fit the customer codification rules, e.g. SSCC logic					
C442	Missing value	Serial Number	Serial numbers are missing. The flag for 'Serial Number Required' is set to TRUE in the PO, therefore serial numbers have to be declared in the DA					



Error Code	Error Case	Keyword	Description					
C443	Invalid value	PO reference	The flag "One PO" is set to TRUE in the PO, therefore the DA can only contain handlings units related to one PO number					
C445	Countercheck failed	Shipped Quantity	Cumulated Quantity in UEs linked to this PO Schedule Line is superior to the 'Despatch Advice Remaining Quantity'					
C446	Countercheck failed	Shipped Quantity	The shipped quantity is zero					
C447	Countercheck failed	Shipped Quantity	The shipped quantity isn't equal to the PO requested quantity					
C448	Invalid value	KIT PO	KIT without Header					
C449	Invalid value	KIT PO	KIT without components					
C450	Missing value	BatchNumber or ManufactureDate or ExpiryDate or SupplierCertificateNumber or Customs or Manufacturer or ManufacturerCertificateNumber or ManufacturingCountry or SerialNo	One of the fields is mandatory or the respective flag to fill this field is set to TRUE in the PO. Value has to be provided in the DA.					
C451	Missing value	UX Number	Please declare the expedition unit (UX) number.					
C452	Missing value	Transport Document or Transport Mode or Departure Date or Estimated Delivery Date	These fields are mandatory, a value has to be proviced.					
C453	Wrong value	Serial Number	Serial numbers can only be declared according to the shipped quantity.					
C454	Countercheck failed	Service Material	PO schedule lines/VMI demands with Customer Material Number related to a service are not intended to be part of a DA					
C459	Wrong value	ForwarderCountry Code or ShipToCountry Code or ShipFromCountry Code or ManufacturingCountry	Country codes have to be declared according to the ISO 3166 standard.					
C461	Invalid value	UX Number or UE Number	UX or UE number do not fit the customer codification rules based on SSCC logic. Checksum Digit is wrong.					
C462	Countercheck failed	Final Delivery Location	Final Delivery Locations of all UX & UE grouped in a Despatch Advice ID must be identical.					



			SUPPLY
Error Code	Error Case	Keyword	Description
C463	Invalid value	UX Number or UE Number	UX or UE number do not fit the customer codification rules, e.g. SSCC logic. Non numerical characters are not allowed.



8 M2M transmission configuration

8.1 Limitations and message sizes

Each message type has a limitation of the number of exportable objects, in order to avoid too big files.

8.1.1 Limitations

The limitations are:

Message Type	Object level	Limit
Demand Forecast	Position	5000
Purchase Order	Schedule Line	5000
Inventory Forecast	Position	5000
Consumption Report	Position	5000
Receipt Advice	Position	5000
Demand Forecast (VMI)	Position	5000
Self Billing	Position	5000
VMI IMO	Material	500

Even if the limit is reached, the files are not cut hard. In order to avoid incomplete data in the export, objects belonging to other objects are exported even if the limit is reached (see example below). If there are still remaining objects which were not be exported, the Message Monitor (column "Information") will show the text "Maximum number of messages reached, there may be still unsent messages". In this case, the scheduler will be executed automatically again as soon as the system receives the supplier's MDN for the previous exported package.

Example: The scheduler for Purchase Order was executed. There are 7.000 Purchase Order Schedule Line objects in AirSupply which have to be sent to the supplier. The Scheduler grabs the first 5.000 objects. If PO Schedule Line with number 4.999 belongs to a Purchase Order which has 14 more Schedule Lines, these lines are added to the file, even if the number of lines then exceeds the limit. In this case the file contains 5.013 PO Schedule Lines. The Message Monitor will show the text that there are still unsent messages. After the supplier received the file and sent back the MDN to AirSupply, the scheduler will export the remaining 1.987 PO Schedule Lines.

8.1.2 Message sizes

The message size of one AS2 transmission from AirSupply depends on the format, message type and the number of messages inside.

8.1.2.1 BoostAero XML

The maximum sizes of one AS2 transmission for BoostAero XML are:

Message Type	Normal message size in MB	ZIPed message size in MB
Demand Forecast	160	16
Purchase Order	110	13
Inventory Forecast	32	12
Consumption Report	32	12
Receipt Advice	32	12
Demand Forecast (VMI)	22	5
Self Billing	40	2



Message Type	Normal message size in MB	ZIPed message size in MB				
	240	6				
Status Notification	1	1				

8.1.2.2 CSV

The maximum sizes of one AS2 transmission for CSV are:

Message Type	Normal message size in MB	ZIPed message size in MB
Demand Forecast	11	2
Purchase Order	7	1
Inventory Forecast	10	6
Consumption Report	10	6
Receipt Advice	10	6
Demand Forecast (VMI)	6	1
Self Billing	6	1
VMI IMO	30	3
Status Notification	1	1

8.2 Message Scheduler

The user can enter the message scheduler display directly via the MyWorkspace screen.

It contains all configuration options for creating a schedule which determines:

- When a message will be sent to an EDI supplier (frequency)
- Which content a message contains (filtering options)

8.2.1 Time Zone

AirSupply provides the possibility to have your user profile in your own time zone. Therefore the times shown in the message scheduler can vary due to different time zones in different user accounts. It is recommended that each location (Supplier Site City), if in a different country or time zone, administrates its own scheduler jobs in order to be valid for the correspondent business hours.

8.2.2 Automatic Stop

The scheduler is designed to have an automatic stop at midnight, if you want the scheduler to cover a 24 hour schedule, please set the Start Time to 00.30.

Please note: The stop at midnight will be done within the respective user's time zone.



8.2.3 Overview

The message scheduler display contains the following overview

s	applyOn Services Administration Log Out SUPPLYON																				
Ae	iro Supplier Inc ADMIN, M2M																				
My	VSupphyOn > My Workspace > EDI Integration 1																				
Ş	Scheduler Message Montor 2																				
1	SupplyOn Det. Yiew v Manage v Reset all Filters																				
	Active	ID	Msg. Type 🔺		Customer Group	Supplier	Site Option:	s Last Execution	Next Execution	Start Date	Start Time	Frequency	Frequency Unit	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Comment
	1	284	10 Forecast / Demand	Forecast	Company A	SITE X	edit	20.02.2014 15:40	27.05.2014 15:38	02.03.2011	15:38	1	Day(s)	V	V	V			V	V	
	7	285	10 Forecast / Demand	Forecast	Company B	SITE X	edit	14.02.2014 16:08	27.05.2014 15:39	01.03.2011	15:39	1	Day(s)	V	V	V			V	V	
	7	292	20 PO / Order		ALL	SITE Y	edit	11.05.2012 10:28	27.05.2014 15:40	02.03.2011	15:40	1	Day(s)	V	V	V			V	V	
	1	287	40 VMI_GrossDemand	ls / VMI De	ALL	SITE X	edit	26.05.2014 16:38	27.05.2014 15:39	02.03.2011	15:39	1	Day(s)	1	1	v			v	1	
	1	289	41 VMI_StockInfo_Sto	ckLevel / In	Company A	SITE X	edit	25.05.2012 15:44	27.05.2014 15:40	02.03.2011	15:40	1	Day(s)	1	1	v	1		v	1	
	1	290	42 VMI_StockInfo_Sto	ckMoverne	ALL	SITE X	edit	30.01.2012 16:48	27.05.2014 15:40	02.03.2011	15:40	1	Day(s)	V	V	V		\checkmark	v	1	
		291	43 StockInfo_GoodsRe	eceipt / Re	ALL	SITE Y	edit	30.01.2012 16:56		02.03.2011	15:40	1	Day(s)	V	V	V			V	V	
3	4	5	6		7	8	9	10	11	12	13	14	15			16	5				17
	Back S	18 ave Cha	3 19	20 Execute now	21 New Schedule	22 Duplicate	23 Delete														

Each configured scheduler job is represented by one line within this overview.

#	Name	Description	
1	Breadcrumb	My SupplyOn > My Workspace > EDI Integration	
2	Scheduler	Two Tabs where you can select if you want to see the scheduler or	
	Message Monitor	check the message monitor	
3	Column Selection	Checkbox to select the respective scheduler job in order to execute	
		one of the following actions:	
		- Execute Now	
		- Duplicate	
		- Delete	
		Default: Not selected	
4	Column Active	Checkbox to activate / deactivate the respective scheduler job. The	
		change will not be saved permanently until the user clicks on the	
		button "Save Changes"	
		After creating a scheduler job with the button "New Schedule" the	
		checkbox is selected by default.	
5	Column ID	Unique ID which identifies the scheduler job (automatically set by	
		the system)	
6	Column Msg. Type	Dropdown menu where the message type of the respective	
		scheduler job can be selected.	
		Valid data is:	
		- 10 Forecast / Demand Forecast	
		- 20 PO / Order	
		 40 VMI_GrossDemands / VMI Demand Forecast 	
		 41 VMI_StockInfo_StockLevel / Inventory Forecast 	
		 42 VMI_StockInfo_StockMovements / Consumption Report 	
		 43 StockInfo_GoodsReceipt / Receipt Advice 	
		 44 StockInfo_ALL (only CSV) 	
		 46 VMI_Monitor / Inventory Forecast 	
		- 50 SBI / Self Billing	
		The change will not be saved permanently until the user clicks on	
		the button Save Changes	
		After creating a scheduler job the default value is 20 PO / Order	



#	Name	Description
7	Column Customer Group	Dropdown menu to select the customer group or the default option "All" which determines a specific customer group or not (in case of the selection "All")
		The list of possible values depends on the user's right to view a
		supplier control point. Only the customer corporate groups are
		displayed for selection, which are linked to the supplier control
		The change will not be saved permanently until the user clicks on
		the button Save Changes.
		After creating a scheduler job the default value is "All".
8	Column Supplier Site	Dropdown menu to select the seller control point which determines
		the supplier's destination EDI system.
		The list of possible value depends on the user's right to see a
		control point. Displayed are the names of the respective control point.
		The change will not be saved permanently until the user clicks on
		the button Save Changes.
		After creating a scheduler job the default value is the name of the
_	Column Ontiono	list control point returned by the query.
9	Column Options	Click on edit opens the Detailed Scheduler Options screens for the
		the respective message type the string adit is not displayed
10	Column Last Execution	Displaye the data and time of the last run of the respective
10		scheduler job
		Format depends on the date and time format configured for the
		If there was no run in the past the date and time remain empty.
11	Column Next Execution	Displays the next planned run of the scheduler job as configured.
		Format depends on the date and time format configured for the
		current user
		If neither the Active checkbox nor one of the weekday checkboxes
		is selected, the date and time remain empty.
12	Column Start Date	Input field to schedule the day of the earliest run of the respective
		The change will not be saved permanently until the user clicks on
		the button Save Changes.
		After creating a scheduler job the current date will be scheduled by
		default. The application directly validates the inserted date. For
		invalid dates an error message is displayed.
13	Column Start Time	Input field to schedule the time for the respective date of the
		earliest run of the scheduler job.
		The format must be HH:MM
		The change will not be saved permanently until the user clicks on
		the button Save Changes.
		After creating a scheduler job the current time will be scheduled by
		default. The application directly validates the inserted time. For
		invalid dates an error message is displayed.



#	Name	Description	
14	Column <i>Frequency</i>	Input field to schedule the time period between the runs of the respective scheduler job. Only whole numbers between 1 and 99 are possible. The associated time unit can be configured within column <i>Frequency Unit.</i> The change will not be saved permanently until the user clicks on <i>Save Changes</i> After creating a scheduler job the default value is "1".	
15	Column <i>Frequency Unit</i>	 Dropdown menu to select the frequency unit corresponding to the frequency value which is scheduled in column <i>Frequency</i> Possible values are: Month(s) Only a frequency of 1 is allowed The scheduler will be executed every month on the defined start date at the specified start time independent from the weekdays All weekdays will be activated automatically Week(s) The scheduler will be executed every [x] weeks on the selected weekdays at the specified start time with the defined frequency Day(s) Only a frequency of 1 is allowed The scheduler will be executed on the specified weekdays at the defined start time Day(s) Only a frequency of 1 is allowed The scheduler will be executed on the specified weekdays at the defined start time Hour(s) A frequency between 1 and 24 is allowed, but values exceeding 12 are not recommended The scheduler will be executed every [x] hours on the selected weekdays starting at the specified start time where [x] is the frequency Minute(s) A frequency between 30 and 99 is allowed The scheduler will be executed every [x] minutes on the specified weekdays starting at the specified start time where [x] is the frequency 	
16	Weekday columns	After creating a scheduler job the default value is "Day(s)". For each weekday a checkbox exists. The respective job only runs on days where the checkbox is selected. The change will not be saved permanently until the user clicks on the button <i>Save Changes</i> . After creating a scheduler job all checkboxes are selected by default	
17	Column Comment	Text field where the user can optionally enter a name or description of the scheduler job. The maximum length is 50 digits, the field is empty by default. The change will not be saved permanently until the user clicks on the button <i>Save Changes</i> .	



#	Name	Description
18	Button Save Changes	By clicking the button all currently configured values are permanently saved to the database.
		The application checks if the scheduled frequency of any scheduler
		is not more than 1 message per 30 minutes. Otherwise an error
		message is displayed which forces the user to change his
		configuration.
19	Button Reset Changes	By clicking the button all scheduler values were reloaded from the
		database and replace all changes since last saving.
		Deleted scheduler jobs will not be re-created.
20	Button Execute Now	By clicking the button all scheduler jobs which are active, will be
		triggered immediately to execute one run.
		The columns Last Execution and Next Execution were updated.
21	Button New scheduler	By clicking the button a new scheduler job is created as a new line
		below the last existing scheduler job.
22	Button Duplicate	By clicking the button all scheduler jobs which are active are
		duplicated as new lines below the last existing scheduler job.
		By default these new scheduler jobs are disabled, i.e. the Check
		Box in column Active is not ticked.
23	Button Delete	By clicking the button all scheduler jobs which are activated will be
		deleted from the database. A confirmation window will be displayed
		where the user must confirm to the deletion. After that the screen is
		refreshed and the deleted scheduler jobs are not visible anymore.



8.2.4 Message Scheduler Details - 10 Forecast / Demand Forecast

The corresponding message type is Demand Forecast.

SupplyOn Services Administration Log Out	SUPPLY ON
Aero Supplier Ltd M2M, Administator	Ŭ
My SupplyOn > My Workspace > EDI Integration > Forecast Filter Options (1164-10 Forecast / Demand Forecast-Aero Supplier Site 1)	Contact Help for this page Print
Filter Options	
Only changed and new data since last export:	
Data Measure: ALL	
LIMIT_EXPORT_FORECASTDEMANDPOSITION per loop is set to 5000	
E-mail notification in case of status 'ERROR':	
6 7 Back Save	

#	Name	Description
1	Breadcrumb	The Breadcrumb is: My SupplyOn > My Workspace > EDI Integration > Forecast Filter
		Options ([Scheduler ID]-[Msg. Type]-[Seller Controlpoint])
2	Checkbox Only changed and new data since last export	If the checkbox is selected the resulting message only contains the Forecast data not marked as "Exported (since last update)". This flag is true if there is no change on the data since the last run of the scheduler. The supplier then only receives the new or modified Forecast data. The change will not be saved permanently until the user clicks on the button <i>Save Changes</i> . The checkbox is selected by default.
3	Dropdown menu "Data Measure":	 The user can select one of the options below. The resulting message then will only contain the forecast data of the respective type. Possible values are: ALL (default) PUBDMD - published demand PRVDMD - previous published demand (last (week) forecast import) SUPCOM - Supplier commitment CUSTUN - Customer tuning {The change will not be saved permanently until the user clicks on the button <i>Save Changes</i>.
4	Information Text	This informs about the configuration of the limitation (see 8.1.1). The information text is shown independently from the configuration "Only new data".
5	Checkbox <i>E-mail</i> notification in case of status 'ERROR'	If the checkbox is selected an e-mail is sent in case an error event occurs in the message monitor. The function is limited to error events of outgoing message transactions. The notification is sent to the e-mail address which is defined in the user account of the M2M administrator.



#	Name	Description	
6	Button Back	By clicking the button the Scheduler Details Display is closed	
		without any savings and the Message Scheduler Display is	
		opened.	
		A warning window will be displayed if the user did changes which	
		would be lost. The user must confirm the exit.	
7	Button Save	By clicking the button all currently configured values shown on this	
		screen are permanently saved to the database.	

8.2.5 Message Scheduler Details Display - 20 PO / Order

The corresponding message type is Order.

SupplyOn Services Administration Log Out	SUPPLY (N)
Aero Supplier Ltd M2M, Administator	
My SupplyOn > My Workspace > EDI Integration > PO Filter Options (1124-20 PO / Order-Aero Supplier Site 1)	Contact Help for this page Print
Filter Options	
Only changed and new data since last export:	
Order Type: ALL	
Order Status:	
LIMIT_EXPORT_POSCHEDULELINE per loop is set to 5000	
E-mail notification in case	
7 8 Back Save	

#	Name	Description	
1	Breadcrumb	<u>My SupplyOn > My Workspace > EDI Integration > PO Filter</u>	
		Options ([Scheduler ID]-[Msg. Type]-[Seller Controlpoint])	
2	Checkbox Only changed	If the checkbox is selected the resulting message only contains the	
	and new data since last	PO data where the flag "Exported (since last update)" is set to	
	export	false.	
		This flag is true if there is no change on the data since the last run	
		of the scheduler.	
		The triggers for setting the flag of the PO Schedule Line to false	
		are:	
		- all message imports (not relevant if changes occurred)	
		- all status changes (not relevant if changes occurred)	
		- UI changes of collaboration values (requested price, quantity and	
		date) by customer user	
		- Changes of Ordering Officer Master Data	
		- Order Line-splitting	
		The supplier then only receives the new or modified PO data.	
		The change will not be saved permanently until the user clicks on	
		the button Save Changes	
		The checkbox is selected by default.	



#	Name	Description	
3	Dropdown Order Type Dropdown Order Status	 message will only contain data from purchase orders of the respective type. Possible values are: ALL (default) OTHER CALLUP / Supply Instruction The change will not be saved permanently until the user clicks on the button Save Changes. Multiple selection drop down menu where the user can select one or more of the options below. The resulting message then will only contain data from purchase orders that have one of the selected status values at the moment the scheduler job is running. Possible values are: ALL (default) NEW ORDER PUBLISHED SUPP ACCEPTED WITH CHANGES OPEN SUPP CHANGE ORDER REQ CANCELLATION REQ PARTIALLY SHIPPED SHIPPED RECEIVED CANCELLED PARTIALLY RECEIVED REJECTED 	
5	Information Text	This informs about the configuration of the limitation (see 8.1.1). The information text is shown independently from the configuration "Only new data".	
6	Checkbox E-mail notification in case of status 'ERROR'	If the checkbox is selected an e-mail is sent in case an error event occurs in the message monitor. The function is limited to error events of outgoing message transactions. The notification is sent to the e-mail address which is defined in the user account of the M2M administrator.	
7	Button Back	By clicking the button the Scheduler Details Display is closed without any savings and the Message Scheduler Display is opened. A warning window will be displayed if the user did changes which would be lost. The user must confirm the exit.	
8	Button Save	By clicking the button all currently configured values shown on this screen are permanently saved to the database.	

8.2.5.1 Supported Status Values

"Status"

Contains the total (summary) status which is in all facets identical to the currently operated status value (for all meaning and impact of collaboration status value.

This value provides therefore 100% compatibility (from user perspective) to current eSC system.



	However, internally the system will always maintain all 4 status values and it will detect required activity and validation by the more detailed separated status values (see below). Possible values are:
	NEW ORDER PUBLISHED, OPEN, CANCELLED, PARTIALLY SHIPPED, SHIPPED, PARTIALLY RECEIVED, RECEIVED, CUSTOMER CHANGE ORDER REQUEST, SUPPLIER ACCEPTED WITH CHANGES, SUPPLIER CHANGE ORDER REQUEST, CANCELLATION REQUEST, REJECTED
"PO sub-status"	Contains the total PO status which is the major status of the PO schedule line. Possible values are: NEW ORDER PUBLISHED, OPEN, CANCELLED, REJECTED
"Logistical sub-status"	Contains the logistical status regarding shipping or receiving. Possible values are: Empty, PARTIALLY SHIPPED, SHIPPED, PARTIALLY RECEIVED, RECEIVED
"Action sub-status"	Contains of the current collaboration activity which is either supplier or customer changes or cancellation request (of customer). Possible values are: Empty, SUPPLIER ACCEPTED WITH CHANGES, CUSTOMER CHANGE ORDER REQUEST, SUPPLIER CHANGE ORDER REQUEST, CANCELLATION REQUEST

Summarized, the meaning and impact of the status field values is as follows:

Туре	Status	Meaning/Remark
(Summary) Status:	NEW ORDER PUBLISHED (NOP)	The order is published to the AirSupply system and is waiting for reaction of supplier ("accept/modify, auto-accept, etc")
	SUPPLIER ACCEPTED WITH CHANGES (SAWC)	The supplier has reviewed a new order in status NOP and proposes a different promised date and/or quantity.
	OPEN	The supplier has accepted the NOP order (or the auto-accept has set NOP to OPEN after the 48-hour timeout).
	CANCELLATION REQUEST (CANREQ)	The customer requests to cancel the PO schedule line.
	CANCELLED	The supplier accepted the cancellation request or the customer did cancel the schedule line which the supplier has changed to status SAWC. CANCELLED can also come from a customer cancellation of a NOP PO. This is a final status and accordingly blocks any collaboration.
	PARTIALLY SHIPPED	 While no collaboration is pending/ongoing, the PO schedule line has received at least one part shipped (reported by ASN process) while not all parts are reported to be shipped. In case collaboration starts, the status will change to an according collaboration status. The partially shipped is only to be set as long as PO schedule line has no received quantities (in which case it is set to PARTICALLY RECEIVED).



Туре	Status	Meaning/Remark
	SHIPPED	While no collaboration is pending/ongoing, the PO schedule line is reported all parts to be shipped (reported by ASN process). The partially shipped is only to be set as long as PO schedule line has no received quantities (in which case it is set to PARTICALLY RECEIVED).
	PARTIALLY RECEIVED	While no collaboration is pending/ongoing the PO schedule line is reported to have already received some (at least one, not all) of the ordered goods (reported by GR process).
	RECEIVED	While no collaboration is pending/ongoing the PO schedule line is reported to have already received all of the ordered goods (reported by GR process). This is a final status and accordingly blocks any collaboration.
	CUSTOMER CHANGE ORDER REQUEST (CCOR)	Customer has modified requested date and/or quantity on the PO schedule line.
	SUPPLIER CHANGE ORDER REQUEST (SCOR)	Supplier has modified promised date and/or quantity on the PO schedule line.
	REJECTED	When supplier has rejected a PO from status NOP (only in SIMPLE collaboration model). Status is in its restrictions and options handled equal to status CANCELLED.
PO sub-status:	NEW ORDER PUBLISHED (NOP)	The order is published to the AirSupply system and is waiting for reaction of supplier ("accept/modify, auto-accept, etc")
	OPEN	The supplier has accepted the NOP order (or the auto-accept has set NOP to OPEN after the 48-hour timeout).
	CANCELLED	The supplier accepted the cancellation request or the customer did cancel the schedule line which the supplier has changed to status SAWC. CANCELLED can also come from a customer cancellation of a NOP PO. This is a final status and accordingly blocks any collaboration.
	RECEIVED	Automatically set by Goods Receipt processing based on comparison of requested and received quantity. This status is therefore comparable to the current final status "RECEIVED" (on the "Status" member).
	REJECTED	When supplier has rejected a PO from status NOP (only in SIMPLE collaboration model). Status is in its restrictions and options handled equal to status CANCELLED.
Logistical sub- status:	PARTIALLY SHIPPED (PARTSHIP)	Automatically set by DA processing based on comparison of requested and shipped quantity. This status value is in severity order and may overwrite by "higher" logistical status SHIPPED, PARTIALLY RECEIVED or RECEIVED.
	SHIPPED	Automatically set by DA processing based on comparison of requested and shipped quantity. This status value is in severity order and may overwrite by "higher" logistical status PARTIALLY RECEIVED or RECEIVED.



Туре	Status	Meaning/Remark
	PARTIALLY RECEIVED (PARTREC)	Automatically set by GR processing based on comparison of requested and received quantity. This status value is in severity order and may be overwritten by "higher" logistical status RECEIVED.
	RECEIVED	Automatically set by GR processing based on comparison of requested and received quantity. This status value identifies the logistical completion of processing on PO.
Action sub- status:	CUSTOMER CHANGE ORDER REQUEST (CCOR)	The action status is only contained and displayed as long as the collaboration is in-process (and may overwrite by following-up status value depending on the user action (and allowed user actions in common).
	CANCELLATION REQUEST (CANREQ)	The action status is only contained and displayed as long as the collaboration is in-process (and may overwrite by following-up status value depending on the user action (and allowed user actions in common).
	SUPPLIER CHANGE ORDER REQUEST (SCOR)	The action status is only contained and displayed as long as the collaboration is in-process (and may overwrite by following-up status value depending on the user action (and allowed user actions in common).

8.2.5.2 Collaboration

8.2.5.2.1 Status change for full collaboration model



<u>Key:</u>

VC = Value Change VR = Value Reset

SM = Send Message

Apply the made changes to the data content.

Reject the made changes on the data content and keep former values. Send message to customer backend (ERP) system.



NEW ORDER PUBLISH	HED		
User Group	Action	New Status	Impact
Customer	modify	NOP	VC, SM
Customer	cancel	CANCELLED	SM
Supplier	modify	SAWC	
Supplier	accept	OPEN	SM

SUPPLIER ACCEPTED WITH CHANGES			
User Group	Action	New Status	Impact
Customer	modify	CCOR	
Customer	accept	OPEN	VC, SM
Customer	accept + penalize1	OPEN	VC, SM
Customer	reject	NOP	VR, SM
Customer	cancel	CANCELLED	SM
Supplier	modify	SAWC	

OPEN			
User Group	Action	New Status	Impact
Customer	modify	CCOR	
Customer	cancel	CANREQ	
Supplier	modify	SCOR	

CUSTOMER CHANGE ORDER REQUEST			
User Group	Action	New Status	Impact
Customer	modify	CCOR	
Customer	cancel	CANREQ	VC, SM
Supplier	modify ²	CCOR	VC, SM
Supplier	accept	OPEN	VC, SM
Supplier	reject ³	OPEN/NOP [3]	VR, SM

SUPPLIER CHANGE ORDER REQUEST			
User Group	Action	New Status	Impact
Customer	modify	CCOR	
Customer	accept	OPEN	VC, SM
Customer	accept + penalize	OPEN	VC, SM
Customer	reject	OPEN	VR, SM
Customer	cancel	CANREQ	
Supplier	modify	SCOR	

CANCELLATION REQU	JEST		
User Group	Action	New Status	Impact
Customer	modify ⁴	CCOR	

¹ On SAWC the accept + penalize is only available if order type is CALLUP or SPARES

² On CCOR suppliers' modify is only available when "Allow-transition-CCOR-to-SCOR" is enabled. This is part of the flexibility design.

³ On CCOR the supplier reject leads to OPEN in case initial status was OPEN, to NOP in case CCOR was reached after an SAWC.

⁴ only if "Collab Actor" = "Import"



Supplier	accept	CANCELLED	SM
Supplier	reject	OPEN	VR, SM

CANCELLED

No action possible

PARTIALLY SHIPPED			
User Group	Action	New Status	Impact
Customer	modify	CCOR	
Supplier	modify	SCOR	

SHIPPED

No action possible

PARTIALLY RECEIVED			
User Group	Action	New Status	Impact
Customer	modify	CCOR	
Supplier	modify	SCOR	

RECEIVED		
	No action possible	

8.2.5.2.2 Status change for simple collaboration model

NEW ORDER PUBLISHED

User Group	Action	New Status	Impact
Supplier	accept	OPEN	SM
Supplier	reject	REJECTED	SM

OPEN	
	No action possible

CANCELLATION REQUEST

User Group	Action	New Status	Impact
Supplier	accept	CANCELLED	SM
Supplier	reject	OPEN	SM

CANCELLED

No action possible

PARTIALLY SHIPPED

No action possible

SHIPPED

No action possible

PARTIALLY RECEIVED



No action possible

RECEIVED

No action possible

8.2.5.2.3 Status change for **nocollab collaboration** model

0.2.0.2.0	
	No action possible

8.2.6 Message Scheduler Details - 40 VMI_GrossDemands / VMI Demand Forecast

The corresponding message type is VMI Demand Forecast.

SupplyOn Services Administration Log Out	SUPPLYON
Aero Supplier Ltd M2M, Administator	
My SupplyOn > My Workspace > EDI Integration > VMI Demand Filter Options (1165-40 VMI_GrossDemands / VMI Dem Filter Options	nand Forecast-Aero Supplier Site 1) ¹ Contact Help for this page Print
Only changed and new data since last export:	
LIMIT_EXPORT_VMIDEMANDPOSITION per loop is set to 5000	
E-mail notification in case of status 'ERROR':	
5 6 Back Save	

#		Description
1	The Breadcrumb is:	<u>My SupplyOn > My Workspace > EDI Integration > VMI Demand</u>
		Filter Options ([Scheduler ID]-[Msg. Type]-[Seller
		Controlpoint])
2	Checkbox Only changed	If the checkbox is selected the resulting message only contains the
	and new data since last	demand data not marked as "Exported (since last update)".
	export	This flag is true if there is no change on the data since the last run
		of the scheduler. The supplier then only receives the new or
		modified demand.
		The change will not be saved permanently until the user clicks on
		the button Save Changes.
		The checkbox is selected by default.
3	Information Text	This informs about the configuration of the limitation (see 8.1.1).
		The information text is shown independently from the configuration
		"Only new data".
4	Checkbox E-mail	If the checkbox is selected an e-mail is sent in case an error event
	notification in case of	occurs in the message monitor. The function is limited to error
	status 'ERROR'	events of outgoing message transactions. The notification is sent
		to the e-mail address which is defined in the user account of the
		M2M administrator.



		SUPPLY
(5 Button <i>Back</i>	By clicking the button the Scheduler Details Display is closed without any savings and the Message Scheduler Display is opened.
		A warning window will be displayed if the user did changes which would be lost. The user must confirm the exit.
(6 Button Save	By clicking the button all currently configured values shown on this screen are permanently saved to the database.



8.2.7 Message Scheduler Details Display – Stock Information

Stock Information is devided into four different scheduler jobs:

- 41 VMI_StockInfo_StockLevel / Inventory Forecast
- 42 VMI_StockInfo_StockMovements / Consumption Report,
- 43 StockInfo_GoodsReceipt / Receipt Advice
- 44 StockInfo_ALL (Only CSV)

These are analogue to the following message types:

- Inventory Forecast
- Consumption Report
- Receipt Advice

8.2.7.1 41 VMI_StockInfo_StockLevel / Inventory Forecast and 42 VMI_StockInfo_StockMovements / Consumption Report

SupplyOn Services Administration Log Out	SUPPL	(0N)
Aero Supplier Ltd M2M, Administator		<u> </u>
<u>My SupplyOn</u> > <u>My Workspace</u> > <u>EDI Integration</u> > Stock Information Filter Options (1166-41 VMI_S Filter Options	tockInfo_StockLevel / Inventory Forecast-Aero Supplier Site 1	Help for this page Print
Only changed and new data since last export:		
LIMIT_EXPORT_STOCKINFORMATIONDETAIL per loop is set to 5000 ³		
5 6 Back Save		
41 VMI_StockInfo_StockLevel / Inventory Forecast		

SupplyOn Services Administration Log Out	SUPPLY
Aero Supplier Ltd M2M, Administator	
My SupplyOn > My Workspace > EDI Integration > Stock Information Filter Options (1166-42 VMI_StockInfo_StockMovements/ConsumptionReport	ort-Aero Supplier Site 1) ¹ Help for this page Prin
Filter Options	

Only changed and new data since last export:	
LIMIT_EXPORT_STOCKINFORMATIONDETAIL per loop is set to 50003	
E-mail notification in case	
5 6 Back Save	

42 VMI_StockInfo_StockMovements / Consumption Report

#		Description
1	The Breadcrumb is:	<u>My SupplyOn > My Workspace > EDI Integration > VMI Stock</u>
		Controlpoint])



#		Description
2	Checkbox Only changed	If the checkbox is selected the resulting message only contains the
	and new data since last	stock information not marked as "Exported (since last update)".
	export	This flag is true if there is no change on the data since the last run
		of the scheduler. The supplier then only receives the new or
		modified stock information.
		The change will not be saved permanently until the user clicks on
		the button Save Changes
		The checkbox is selected by default.
3	Information Text	This informs about the configuration of the limitation (see 8.1.1).
		The information text is shown independently from the configuration
		"Only new data".
4	Checkbox E-mail	If the checkbox is selected an e-mail is sent in case an error event
	notification in case of	occurs in the message monitor. The function is limited to error
	status 'ERROR'	events of outgoing message transactions. The notification is sent
		to the e-mail address which is defined in the user account of the
		M2M administrator.
5	Button Back	By clicking the button the Scheduler Details Display is closed
		without any savings and the Message Scheduler Display is
		opened.
		A warning window will be displayed if the user did changes which
		would be lost. The user must confirm the exit.
6	Button Save	By clicking the button all currently configured values shown on this
		screen are permanently saved to the database.

8.2.7.2 43 StockInfo_GoodsReceipt / Receipt Advice

SupplyOn Services Administration Log Out	SUPPLYON
Aero Supplier Ltd M2M, Administator	
My SupplyOn > My Workspace > EDI Integration > Stock Information Filter Options (1168-43 StockInfo_GoodsReceipt / Receipt Advice-Aero Supplier	Site 1) Contact Help for this page Print
Filter Options	
Only changed and new data since last export:	
Process Key: ALL	
LIMIT_EXPORT_STOCKINFORMATIONDETAIL per loop is set to 5000	
E-mail notification in case	
67	
Back Save	

43 StockInfo_GoodsReceipt / Receipt Advice

#		Description
1	The Breadcrumb is:	<u>My SupplyOn > My Workspace > EDI Integration > Stock</u> Information Filter Options ([Scheduler ID]-[Msg. Type]-[Seller Controlpoint])



#		Description						
2	Checkbox Only changed	If the checkbox is selected the resulting message only contains the						
		Stock information not marked as Exported (since last update).						
	export	I his hag is true if there is no change on the data since the last run						
		of the scheduler. The supplier then only receives the new or						
		The change will not be saved permanently until the user clicks on						
		the button Save Changes						
		The checkbox is selected by default.						
3	3 Dropdown menu "Process The user can select one of the options below. Th							
	Key″	message then will only contain goods receipt / receipt advice data						
		of the respective process key.						
		Possible values are:						
		ALL (default)						
		• STA GR						
		VMI GR						
4	Information Text	This informs about the configuration of the limitation (see 8.1.1).						
		The information text is shown independently from the configuration						
		"Only new data".						
5	Checkbox <i>E-mail</i>	If the checkbox is selected an e-mail is sent in case an error event						
	notification in case of	occurs in the message monitor. The function is limited to error						
	status 'ERROR'	events of outgoing message transactions. The notification is sent						
		to the e-mail address which is defined in the user account of the						
		M2M administrator.						
6	Button Back	By clicking the button the Scheduler Details Display is closed						
		without any savings and the Message Scheduler Display is						
		opened.						
		A warning window will be displayed if the user did changes which						
		would be lost. The user must confirm the exit.						
7	Button Save	By clicking the button all currently configured values shown on this						
		screen are permanently saved to the database.						

8.2.7.3 44 StockInfo_ALL (Only CSV)

SupplyOn Services Administration Log Out	SUPPLY
Aero Supplier Ltd M2M, Administator	
My SupplyOn > My Workspace > EDI Integration > Stock Information Filter Options (1169-44 StockInfo_ALL (Only CSV)-Aero Supplier Site 1)	Contact Help for this page Print
Filter Options	
Only changed and new	
LIMIT_EXPORT_STOCKINFORMATIONDETAIL per loop is set to 5000	
E-mail notification in case of status 'ERROR':	
5 6 Beck Save	



#		Description						
1	The Breadcrumb is:	<u>My SupplyOn > My Workspace > EDI Integration > Stock</u>						
		Information Filter Options ([Scheduler ID]-[Msg. Type]-[Seller						
		Controlpoint])						
2	Checkbox Only changed	If the checkbox is selected the resulting message only contains the						
	and new data since last	stock information not marked as "Exported (since last update)".						
	export	This flag is true if there is no change on the data since the last run						
		of the scheduler. The supplier then only receives the new or						
		modified stock information.						
		The change will not be saved permanently until the user clicks on						
		the button Save Changes						
		The checkbox is selected by default.						
3	Information Text	This informs about the configuration of the limitation (see 8.1.1).						
		The information text is shown independently from the configuration						
		"Only new data".						
4	Checkbox <i>E-mail</i>	If the checkbox is selected an e-mail is sent in case an error event						
	notification in case of	occurs in the message monitor. The function is limited to error						
	status 'ERROR'	events of outgoing message transactions. The notification is sent						
		to the e-mail address which is defined in the user account of the						
		M2M administrator.						
5	Button Back	By clicking the button the Scheduler Details Display is closed						
		without any savings and the Message Scheduler Display is						
		opened.						
		A warning window will be displayed if the user did changes which						
		would be lost. The user must confirm the exit.						
6	Button Save	By clicking the button all currently configured values shown on this						
		screen are permanently saved to the database.						

8.2.8 Message Scheduler Details – 46 VMI Monitor / Inventory Forecast

The corresponding message is Inventory Monitor.

SupplyOn Services Administration Log Out	SUPPLYON
Aero Supplier Ltd M2M, Administator	
My SupplyOn > My Workspace > EDI Integration > VMI Monitor Filter Options (1170-46 VMI_Monitor / Inventory Forecast-Aero Supplier Site 1)	Contact Help for this page Print
Filter Options	
Only changed and new data since last export:	
LIMIT_EXPORT_IMOMATERIALS per loop is set to 500 3	
E-mail notification in case	
5 6 Back Save	

#		Description
1	The Breadcrumb is:	<u>My SupplyOn</u> > <u>My Workspace</u> > <u>EDI Integration</u> > VMI Monitor
		Controlpoint])



#		Description					
2	Checkbox Only changed	If the checkbox is selected the resulting message only contains the					
	and new data since last	stock information not marked as "Exported (since last update)".					
	export	This flag is true if there is no change on the data since the last run					
		of the scheduler. The supplier then only receives the new or					
		modified stock information.					
		The change will not be saved permanently until the user clicks on					
		the button Save Changes					
		The checkbox is selected by default.					
3	Information Text This informs about the configuration of the limitation (see 8						
		The information text is shown independently from the configuration					
		"Only new data".					
4	Checkbox E-mail	If the checkbox is selected an e-mail is sent in case an error event					
	notification in case of	occurs in the message monitor. The function is limited to error					
	status 'ERROR'	events of outgoing message transactions. The notification is sent					
		to the e-mail address which is defined in the user account of the					
		M2M administrator.					
5	Button Back	By clicking the button the Scheduler Details Display is closed					
		without any savings and the Message Scheduler Display is					
		opened.					
		A warning window will be displayed if the user did changes which					
		would be lost. The user must confirm the exit.					
6	Button Save	By clicking the button all currently configured values shown on this					
		screen are permanently saved to the database.					

8.2.9 Message Scheduler Details - 50 SBI / Self Billing

The corresponding message type is Self Billing.

SupplyOn Services Administration Log Out	SUPPLYON
Aero Supplier Ltd M2M, Administator	
My SupplyOn > My Workspace > EDI Integration > SBI Filter Options (1304-50 SBI / Self Billing-Aero Supplier Site 1)	Contact Help for this page Print
Filter Options	
Only changed and new data since last export:	
LIMIT_EXPORT_SBIPOSITIONS per loop is set to 5000 3	
E-mail notification in case	
5 6 Back Save	

Message Scheduler Details Display (SBI / Self Billing)

#	Name	Description
1	The Breadcrumb is:	<u>My SupplyOn > My Workspace > EDI Integration > SBI Filter</u>
		Options ([Scheduler ID]-[Msg. Type]-[Seller Controlpoint])



2	Checkbox Only changed and new data since last export	If the checkbox is selected the resulting message only contains the SBI data not marked as "Exported (since last update)". This flag is true if there is no change on the data since the last run of the scheduler. The supplier then only receives the new or modified SBI. The change will not be saved permanently until the user clicks on
		The checkbox is selected by default.
3	Information Text	This informs about the configuration of the limitation (see 8.1.1). The information text is shown independently from the configuration "Only new data".
4	Checkbox <i>E-mail</i> notification in case of status 'ERROR'	If the checkbox is selected an e-mail is sent in case an error event occurs in the message monitor. The function is limited to error events of outgoing message transactions. The notification is sent to the e-mail address which is defined in the user account of the M2M administrator.
5	Button Back	By clicking the button the Scheduler Details Display is closed without any savings and the Message Scheduler Display is opened. A warning window will be displayed if the user did changes which would be lost. The user must confirm the exit.
6	Button Save	By clicking the button all currently configured values shown on this screen are permanently saved to the database.

8.3 Message Monitor

The user can enter the Message Monitor Display via the "Message Monitor" tab on the Message Scheduler View.

The message monitor shows a report over all messages (inbound and outbound) for one supplier within the last 45 days.

The following screen shows the Message Monitor

L]	SupplyOn Se	rvices	Administra	tion Log Out					SUPI	PLY	(ℕ)				
A	ero Supplie	r Inc A	DMIN, M2M	1											
M	Wy SupplyOn > My Workspace > EDI Integration 1														
A	ctive filter: Sa	pplyon D	efault												Hide Search Area
g	luick Search	Advanced	Search												
			~		Add line Delete lin	<u>e</u>								My search profiles	
	Search Re	set													✓ Manage •
	Scheduler	2 Messa	ae Monitor												
	SupplyOn D	ef. View	▼ M	lanage +											Reset all Filters
	Date	3	Time 4	Direction	Mea Tune	Schedule ID 7	Meg ID	9	Customer Group	0	Supplier Site 10	Statue	44	Information 12	
17	26.05.201	3	17:23	OUT	20 PO / Order	292	S14315	0	ALL	9	SITE X	PENDING	11	momation 12	
	26.05.201		17:20	OUT	10 Forecast / Demand Forecast	285	S14313		Company B		SITE X	SUCCESS		Transmission contains no data	
	26.05.2014		17:20	OUT	40 VMI GrossDemands / VMI Demand	. 287	S14314		ALL		SITE X	SUCCESS		Transmission contains no data	
E	26.05.201		17:20	OUT	42 VMI_StockInfo_StockMovements / C	. 290	S14312		ALL		SITE X	SUCCESS		Transmission contains no data	
E	26.05.201		17:20	OUT	43 StockInfo_GoodsReceipt / Receipt A.	. 291	S14311		ALL		SITE Y	SUCCESS		Transmission contains no data	
E	26.05.201		17:20	OUT	41 VMI_StockInfo_StockLevel / Invento	289	S14310		Company A		SITE X	SUCCESS		Transmission contains no data	
E	26.05.201	1	17:20	OUT	10 Forecast / Demand Forecast	284	S14309		Company A		SITE X	SUCCESS			
E	26.05.201		17:20	OUT	20 PO / Order	292	S14308		ALL		SITE Y	ERROR		Transmission Error: Could not send me	ssage to EDI partner.
E	26.05.201	ļ.	16:38	OUT	40 VMI_GrossDemands / VMI Demand	. 287	S14307		ALL		SITE X	SUCCESS		Transmission contains no data	
	<														>
	Back Down	load													
		and a start		ne Louise	Notifier L. Oliver Belleviter										Le
	a eurues:	Delect all	matches on P	ade l Select all	Matches				Enuries per page	20	~				Page 1 011 Next Last

Each reported message which was triggered by a scheduler job and each message which a supplier has sent to SupplyOn is represented by one line within this overview.

The standard search and filter options of the SupplyOn application are available for this screen.



All fields on this screen are for read-only.

#	Name	Description
1	Breadcrumb	My SupplyOn > My Workspace > EDI Integration
2	Scheduler	Two Tabs where you can select if you want to see the scheduler or
	Message Monitor	check the message monitor
3	Column Date	For outbound messages: Sending date
		For inbound messages: Date when the messages were reported
		within the AirSupply application.
4	Column <i>Time</i>	For outbound messages: Sending time
		For inbound messages: Time when the messages were reported
		within the AirSupply application.
5	Column Direction	Shows the direction of the respective message from the SupplyOn
		point of view.Possible values are:
		- IN
		- OUT
6	Column <i>Msg.Type</i>	Shows the type of the respective message. Possible values are:
		- Forecast / Demand Forecast
		 Forecast Response/ Demand Forecast Response
		- PO / Order
		- PO Response/ Order Response
		- DA / Despatch Advice
		 VMI_GrossDemands / VMI Demand Forecast
		 VMI_StockInfo_StockLevel / Inventory Forecast
		 VMI_StockInfo_StockMovements / Consumption Report
		 VMI_StockInfo_GoodsReceipt / Receipt Advice
		- VMI_StockInfo_ALL
		 VMI_PlannedReceipts / Supply Notification
		 VMI_Monitor / Inventory Forecast
		- SBI / Self Billing
7	Column Schedule ID	The ID of the respective scheduler job which initiated the message.
		For inbound messages the field is filled with a dash "-".
8	Column <i>Msg.ID</i>	Unique Message ID which is automatically set by the system for
		outbound messages.
		For CSV there is an additional column dedicated to the message
		ID, but only for the first line.
		For BoostAero XML there is a dedicated field.
		Related to the inbound messages the value is taken from the
		message content (message ID set by the supplier's EDI system).
9	Column Customer Group	Displayed is not the 'organization ID' of the corporate group but the
		'organization name', or 'All' in case this option was selected by the
		user for the related scheduled job.
10	Column Supplier Site	The seller controlpoint representing the supplier's EDI system
		which was the sender/receiver of this message.



Name	Description
Column Status	The message transmission status.
	The following values are possible:
	- SUCCESS
	(the message was successfully transmitted)
	- ERROR
	(any transmission error occurred)
	- PENDING
	(a message was inggered out by a scheduler job and now the system is waiting for a success or error potification)
	Note: The transmission status is set depending on the positive or
	negative synchronous response of the supplier on HTTP(S) level.
	There is no validation of an asynchronous response.
	If a message went on error, it must be manually resent by using the
	"Execute Now" button within the scheduler display.
	The data is considered as "downloaded" as soon as the message
	is successfully sent to the suppliers EDI system.
Column Information	The following information are shown within this field:
	- Error: If the scheduler export runs on error, the error
	message is shown here
	- Limit reached: If the limit for one scheduler execution is
	reached, the text "Maximum number of messages reached
	within this transmission, processing loop with ID=SXXXXX
	is shown. The scheduler will be executed automatically
	for the previous exported package
	- No data to transmit: If there are no data to transmit for the
	configured schedule, the text "Transmission contains no
	data" is shown
	Column Status Column Information

9 Additional Important Information

9.1 Downtimes

SupplyOn has scheduled downtimes on the weekend (for details on the specification of services, please see <u>www.supplyon.com</u>). During downtimes SupplyOn is not able to receive messages. The supplier has to take care that messages that have not been sent during that downtime will be restarted.

9.1.1 Scheduled Downtimes

The supplier will be informed of a downtime 6 months in advance via e-mail and additionally on our website.

9.1.2 Unscheduled Downtimes

The supplier will be informed immediately via e-mail.

9.1.3 Transmissions within downtimes

Schedules that have not been executed will not be caught up within the next schedule. If messages cannot be transmitted successfully the supplier has to manually restart the messages using the Message Monitor.



9.2 File size limitations

9.2.1 Upload file types

Within AirSupply you can transmit files up to a size of 4MB. Files that exceed this limit will be blocked. This is mainly relevant for CSV files as these give the possibility to have several PO confirmations or forecast confirmations within one file. For Boost-XML you will send 1 Order Response or 1 Demand Forecast Response within 1 file, so the risk of exceeding 4MB is minor.

9.2.2 Download file types

For the moment there is no limitation configured for the download of files but according to the limitation of the upload file size, we reserve the right to split files. So instead of receiving 1 x 20MB file, it could happen that you might receive $4 \times 5MB$ files.

9.3 Partner acts as seller and buyer

If a partner in AirSupply acts as a seller and buyer the same format should be used (e.g. BA XML as buyer and seller). If not, two AS2 partners should be configured on both sides (one for buyside and one for sellside).

If different formats are used (e.g. IDoc XML on buyside and BA XML on sellside) and just one AS2 partner is configured, the Status Notification message can be sent in one defined format (e.g. IDoc XML for buy- and sellside messages).