Operator's Manual

# Iris<sup>®</sup> Analytics





These operating instructions provide the necessary information for proper operation of the Iris Analytics. There may be information provided in this manual that is not relevant for your system. Do not operate the Iris Analytics without completely reading and understanding these instructions. If you encounter any serious incident with product, please notify the competent authority in your country and the manufacturer.

**Notice:** Purchase or possession of this device does not carry any express or implied license to use with replacement parts which would, alone or in combination with this device, fall within the scope of one of the relating patents.

Masimo Corporation 52 Discovery Irvine, CA 92618, USA Tel.: 949-297-7000 Fax.: 949-297-7001 www.masimo.com

Patents: www.masimo.com/patents.htm

**9**<sup>®</sup>, Masimo®, rainbow®, SET®, Iris®, Signal Extraction Technology®, Rad®, Rad-97®, Root®, SedLine®, Radical-7®, Radius-7®, NomoLine®, O3®, PVi®, RRa®, SpCO®, SpHb®, and SpMet® are federally registered trademarks of Masimo Corporation.

Centroid<sup>™</sup>, Hospital Automation<sup>™</sup>, Patient SafetyNet<sup>™</sup> and ORi<sup>™</sup> are trademarks of Masimo Corporation. The use of the trademarks PATIENT SAFETYNET and PSN are under license from University HealthSystem Consortium.

All other trademarks and registered trademarks are property of their respective owners.

© 2021 Masimo Corporation

# Contents

About This Manual	5
Product Description, Key Features, and Intended Use	5
Product Description and Key Features	5
Intended Use	5
Safety Information, Warnings and Cautions	5
Performance Warnings and Cautions	5
Cleaning and Service Warnings and Cautions	5
Compliance Warnings and Cautions	5
Chapter 1: Description	7
Iris Analytics Dashboard	7
Chapter 2: Operation	9
Logging in to Iris Analytics	9
Chapter 3: Reports	
Server/Domain Selection	11
Population Reports	12
Patient Reports	21
Print	
Chapter 4: User Management	
My Account	
User Administration	
User Roles	
System Info	
Logging Out of Iris Analytics	
Chapter 5: Messages	41
Messages	41
Chapter 6: Troubleshooting	
Troubleshooting the Iris Analytics	
Chapter 7: Specifications	45
Minimum System Requirements	
Supported Browsers	
Supported Virtual Machines	45
Supported Systems	
Supported Languages	
Default Account Information	
Symbols	
Chapter 8: Service and Warranty Information	47
Masimo Technical Services	47
Contacting Masimo	47
Appendix	
Iris Analytics Virtual Machine Download and Installation	
Index	51

# About This Manual

This manual explains how to set up and use the Iris® Analytics. Important safety information relating to general use of Iris Analytics appears in this manual. Read and follow any warnings, cautions, and notes presented throughout this manual. The following are explanations of warnings, cautions, and notes.

A warning is given when actions may result in a serious outcome (for example, injury, serious adverse effect, death) to the patient or user.

**WARNING**: This is an example of a warning statement.

A caution is given when any special care is to be exercised by the patient or user to avoid injury to the patient, damage to this device, or damage to other property.

CAUTION: This is an example of a caution statement.

A note is given when additional general information is applicable.

Note: This is an example of a note.

# Product Description, Key Features, and Intended Use

# Product Description and Key Features

Masimo® Iris Analytics is a software application that aggregates data from connected Masimo systems in order to provide the ability for reporting of hospital-wide alarm events and patient specific data and is part of the Hospital Automation<sup>™</sup> portfolio. The Iris Analytics software is installed on a server and can be accessed through web browsers.

- Key features of Iris Analytics include:
- Web login with role based user account management.
- Support for up to 25 individual user accounts.
- Retrieve data from connected Masimo systems.
- Generate and print reports for patients, events, and alarm notifications.
- Simulate models on the quantity of alarm events and alarm notifications based on alarm limit settings.
- Export data as raw data .csv file or graphical .pdf reports.

### Intended Use

Masimo® Iris® Analytics is a software application intended to generate reports through the aggregation of data from compatible devices through Masimo systems.

# Safety Information, Warnings and Cautions

Note: Please refer to the Operator's Manual or Directions For Use for Iris Analytics host device.

# Performance Warnings and Cautions

WARNING: The Iris Analytics does not use real-time data. Iris Analytics should not be used for monitoring patients.

**CAUTION:** The Iris Analytics relies on communication with Masimo systems through the facility's network. Unanticipated failure or alteration of network components (including but not limited to: disconnection or malfunctioning of a networking device/switch/router/ethernet cable) may result in loss of connectivity of the Iris Analytics. Altering or making changes to the Hospital Network should be done with proper knowledge.

**Note:** Iris Analytics is designed to work with compatible devices. Verify the compatibility before use.

# Cleaning and Service Warnings and Cautions

Note: Iris Analytics installation must be completed by Masimo or an authorized service department.

# **Compliance Warnings and Cautions**

WARNING: Only use Iris Analytics in accordance with this manual. Unauthorized use of the software may void the license.

# Chapter 1: Description

# Iris Analytics Dashboard

The Dashboard is the default screen that displays after logging into Iris Analytics. The Dashboard displays all of the information available through Iris Analytics for the selected hospital server(s) and domain(s). See **Server/Domain Selection** on page 11. The Dashboard screen may also be referred to as the Main Screen.

The following information describes the features of the Iris Analytics Dashboard screen.



Item	Feature	Description	Item	Feature	Description
1	Iris Analytics Screen Header	Access reports and user information. See Iris Analytics Screen Header and Footer on page 8.	7	Total Patients	Displays the patients report. Click to view. See <b>Patient Report</b> on page 14.
2	Server/Domain Selection	Allows selection of the desired hospital server and domain to view data. See <b>Server/Domain Selection</b> on page 11.	8	Total Devices	Displays the devices report. Click to view. See <i>Device Report</i> on page 17.
3	Report Range Date and Time Selection	Displays date and time range for displayed reports. Allows user to change date and time to modify and view reports. See <i>Selecting Date and Time</i> on page 13.	9	Total Notifications	Displays the notifications report. Click to view. See <i>Notification Report</i> on page 16.
4	Print	Allows the displayed information to be printed. See <b>Print</b> on page 35.	10	Total Events	Displays the events report. Click to view. See <i>Event Report</i> on page 15.
5	Events Pie Chart	Displays number of events for all patients within the selected domain(s) by type.	11	5 Patients with Most Events	Displays the top 5 patients with the most events.*
6	Notifications Pie Chart	Displays number of notifications for all patients within the selected domain(s) by type.	12	5 Re-Escalations	Displays the five (5) most recent re-escalation notifications.* See Initial, Escalation, and Re-Escalation Notifications.

\* The columns in the tables can be sorted by ascending or descending order.

Masimo Corporation

#### **Dashboard Printing Options**

When printing the Dashboard, the following items can be selected or deselected to print. See **Print** on page 35.

- Pie Charts
- Totals Statistics
- Statistics

# Iris Analytics Screen Header and Footer

### Header

The image and table below describe the features of the Iris Analytics Screen Header.

	1	2	3	\$	4	5
٨	Dashboard	Reports -	02/27/202	0   10:56 AM	Super Admin	SA -

ltem	Feature	Description
1	Dashboard	Select from any screen to return to the <i>Dashboard</i> screen. See <i>Iris Analytics Dashboard</i> on page 7.
2	Reports Menu	Select to display the <i>Reports</i> drop-down menu. See <i>Chapter 3: Reports</i> on page 11.
3	Date/Time	Displays the current server date and time.
4	User Name and Initials	Displays the currently logged in user.
5	User Menu	Select the arrow to display the drop-down <i>User Menu</i> options. See <b>Chapter 4: User Management</b> on page 37.

### Footer

The image and table below describe the features of the Iris Analytics Screen Footer.

**S** Masino

Item	Feature	Description
1	Iris Analytics Software Version	Displays the current software version for Iris Analytics. See <b>System Info</b> on page 40 for additional information.

Build E1000-027.01

1

# Chapter 2: Operation

# Logging in to Iris Analytics

Follow the instructions below to log in to Iris Analytics. If the user does not have an account, or if they have forgotten their login credentials, they will not be able to log in to Iris Analytics and must contact the system administrator to set up an account or set a new password. See *Chapter 4: User Management* on page 37. A default account is available to access Iris Analytics to set up user accounts. For default account credentials, see *Default Account Information* on page 45.

- 1. Open a web browser. See *Supported Browsers* on page 45.
- 2. Enter the Iris Analytics address into the browser address bar and select Enter. Refer to the system administrator for the address for Iris Analytics.
- 3. The login screen displays. In the Sign In screen, enter login credentials:
  - Enter Username.
  - Enter **Password**.
- 4. Press/Select the Sign In button.

Note: A prompt to enter a new password may display. See *Change Password at First Login* on page 9.

- 5. After successful login, the *Dashboard* screen appears by default. See *Iris Analytics Dashboard* on page 7.
  - To log out of an Iris Analytics user account, see Logging Out of Iris Analytics on page 40.

# Change Password at First Login

When a new user logs in for the first time after a new account has been created for that user, a new password is required during the login process before access to the system is granted.

- 1. On the Please change the initial password screen, fill in the old and new password information as shown. When complete, click the Save button.
  - The new password should be at least 10 characters long
  - The new password should have at least 3 out of these 4 character groups: Uppercase, lowercase, digits, special
- 2. Confirmation displays when the password has been successfully changed.
- 3. After changing the password, the login screen displays and the user must now log in with the new password.

# Chapter 3: Reports

Data is aggregated from the selected server(s) and domain(s) (see *Server/Domain Selection* on page 11). Reports can then be generated from the available data at the *Domain* level (for all patients, devices or events in a selected server/domain - see *Population Reports* on page 12) or at the *Patient* level (for a single patient - see *Patient Reports* on page 21).

# Server/Domain Selection

The Server/Domain Selection feature at the top of the screen allows the user the ability to select from the available hospital server(s) and domain(s) for viewing data. When selected, a graphical representation of the available servers/domains display. In the following example, there are two (2) hospital servers available, and both are selected.



Select the desired server and domain(s) by selecting the graphic directly. In the following example, only one of the two (2) available hospital servers is selected.

To deselect a domain within the server, select the desired domain directly. When deselected, the domain is grayed out.

🗧 Multiple Selections 👻	🎫 09/29/2019 10:40 AM - 09/30/2019 10:40 AM 🔻	
	- General - Ceneral Ceneral	n-East
	- Psychiatric - remuldomain	
	Cu aslemitomain	
	HospitalServer2 Ceneral Ceneral Ceneral	al-West
	Cancel	ок

Multiple Selections	📰 09/29/2019 10:40 AM - 09/30/2019 10:4	AM ▼
	HospitalServer1 - Payo astar	al Conemi East domain
	Ca	ncel OK

If desired, a single area within a hospital domain can be selected for viewing a subset of data, as shown in the following example.

Once the desired domain(s) is defined, select the **OK** button at the bottom to apply the selection, or the **Cancel** button to cancel and return to the previous screen.



- Patient Report on page 14.
- Event Report on page 15.
- Notification Report on page 16.
- Device Report on page 17.
- **Positioning Report (Population)** on page 18
- Limit Analysis on page 19.

Population Reports are generated for the selected servers/domains (2) based on the selected date and time (3) at the top of the Iris Analytics Window. See Server/Domain Selection on page 11 and Selecting Date and Time on page 13.

# Selecting Date and Time

Users can select the date and time range to view data and generate reports at the population level. This can also be performed from the *Event Report*, *Notification Report*, *Device Report*, or the *Limit Analysis Report*.

🗧 Multiple Selections 🔻	🎫 10/01/2019 12:00 AM - 1	0/01/201	9 9:52	AM ·	-												
				A	ug 20	19						s	ep 20	19			
	Today	Su	Мо	Tu	We	Th		Sa		Su	Мо	Tu	We	Th		Sa	
	Vesterdau	28	29	30	31					25	26	27	28	29	30	31	
	resteruay							10									
	Last 7 Days		12	13	14	15	16					10		12	13	14	
		18	19	20	21	22	23	24		15	16	17	18	19	20	21	
	Last 30 Days	25	26	27	28	29	30	31		22	23	24	25	26	27	28	
		1	2	3	4	5	6	7		20	30	1					
	This Month		-	U		U	Ŭ			-	00						
	Last Month												-				
		0	•	C	00		00	•		0	•	C	0		00	T	
	Custom range																
											-						
									CANC	EL				- 0	ж		

Clicking on the calendar directly switches to the **Custom Range** option. From there, select the desired date range, and if necessary, a time range below the calendar option (in hours, minutes and seconds).

🗧 Multiple Selections 🔻	🎟 10/01/2019 12:00 AM - 10	0/01/2019	9 9:52	AM •													
	Today	<b></b>	Ma	AI	Jg 20	19 Th		0		0	Ma	- Si - T-	ep 20	19 Th	~	0.0	
		28	20	30	31	1	2	38		-3u	26	7 <b>u</b>	28	20	30	31	
	Yesterday	4	5	6	7	8	9	10									
	Last 7 Dava	11	12	13		15		17									
				20								17	18	19	20	21	
	Last 30 Days									22	23	24	25	26	27	28	
										29	30						
	This Month																
	Lest Month																
		6		3	0	•	04			12		4	.5 ·		10		
	Custom range																
								_			_						
									CAN	CEL					)K		

After a date and time range is selected, select the **OK** button to apply the range or **Cancel** to cancel the selection. The new date and time range displays in the *Report Range Date and Time Selection* on the *Dashboard*, and the reports generate for the selected range.

# Patient Report

The Patient Report displays a pie chart broken out by patient location (domain) within the population, with total patients displayed. The tables below the chart provide details about the patients.



ltem	Feature	Description
1	Domains Pie Chart/List	Visual/Numeric display of number of patients by domain.
2	Total Patients	Total number of patients for all domains shown.
3	Patient Details List	Patient details listed by patient label.* Right-click on rows within the table to view available options. See <b>Additional Patient Reports</b> within this section.
4	Print	Print Patient Report. See <b>Print</b> on page 35.

\* The columns in the tables can be sorted by ascending or descending order.

#### **Patient Report Printing Options**

When printing the Patient Report, the following items can be selected or deselected to print. See Print on page 35.

- Patients Statistics
- Patients List

## Additional Patient Reports

In the *Patients* table, right-clicking within a patient row displays a pop-up box with options for viewing patient-specific reports. See *Patient Reports* on page 21.

# Event Report

The Event Report displays a pie chart broken out by Clinical, Non-Clinical and Modifier Events, with the total number of events also displayed. The tables below the chart provide details for the events.



ltem	Feature	Description
1	Events Pie Chart/List	Visual/Numeric display of number of events by type.
2	Total Events	Total number of events.
3	Events List	Event details grouped by Clinical, Non-Clinical and Modifier.*
		<ul> <li>Click on an event will give you an Event Detail.</li> <li>Right-click on rows within the table to view available options.</li> </ul>
		See <b>Event Details</b> for additional information.
4	Print	Print Event Report. See <b>Print</b> on page 35.

\* The columns in the tables can be sorted by ascending or descending order.

#### **Event Details**

In the *Event* tables, right-clicking within a row displays a pop-up box with the option to view details for the selected event. See *View Event Details* on page 16.

#### **Event Report Printing Options**

When printing the Event Report, the following items can be selected or deselected to print. See Print on page 35.

- Events Statistics
- Clinical Events List
- Non-Clinical Events List
- Modifier Events List

# View Event Details

When View Event Details is selected, the Events Report screen displays information for the selected event for all patients, listed by Start Time. In this example, the event is  $SpO_2$  High.

The columns in the tables can be sorted by ascending or descending order.

EVENT REPORT [Sp02 High]								
pO₂ High								
Start Time	Stop Time	Patient ID	First Name	Last Name	Domain	Room	Device	Duration
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254001	Oliver	Kluth	default domain		Eagle	1m 0s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254002	Lora	Tramble	default domain		Eagle	1m 3s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254003	Marna	Ferber	default domain		Eagle	1m 2s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254004	Tory	Littler	default domain		Eagle	1m Os
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254005	Malcom	Larson	default domain		Eagle	1m 0s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254006	Ellena	Pearce	default domain		Eagle	1m 0s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254007	Kendal	Bell	default domain		Eagle	1m 23s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254008	Kim	Pearsall	default domain		Eagle	1m Os
01/18/1970 4:33	01/18/1970 4:33							

#### **Event Report Printing Options**

When printing the Event Report, the following item can be selected or deselected to print. See Print on page 35.

• Events List

# Notification Report

The Notification Report displays a pie chart broken out by Initial, Escalation and Re-Escalation notifications, with the total number of notifications also displayed. The tables below the chart provide details for the notifications.



ltem	Feature	Description
1	Notification Pie Chart/List	Visual/Numeric display of number of notifications by type.
2	Total Notifications	Total number of notifications for all types.
3	Notification Details List	Notification details grouped by Initial, Escalation and Re-Escalation.* See Initial, Escalation, and Re-Escalation Notifications.

ltem	Feature	Description
4	Print	Print Notification Report. See <b>Print</b> on page 35.

\* The columns in the tables can be sorted by ascending or descending order.

#### **Notification Report Printing Options**

When printing the Notification Report, the following items can be selected or deselected to print. See Print on page 35.

- Notification Statistics
- Initial Notification List
- Escalation Notification List
- Re-Escalation Notification List

## **Device Report**

The Device Report displays a pie chart broken out by device with the total number of devices also displayed. The tables below the chart provide details for the devices.



Item	Feature	Description
1	Device Pie Chart/List	Visual/Numeric display of number of devices by type.
2	Total Devices	Total number of devices for all types.
3	Device Details List	Device details listed by device type.*
4	Print	Print Device Report. See <b>Print</b> on page 35.

\* The columns in the tables can be sorted by ascending or descending order.

#### **Device Report Printing Options**

When printing the Device Report, the following items can be selected or deselected to print. See Print on page 35.

- Device Statistics
- Device List

# Positioning Report (Population)

The *Positioning Report* for the population displays a pie chart broken out by percentage in or out of compliance. The tiles below the chart provide details for the position report.



Item	Feature	Description
1	Compliance Pie Chart	Visual display of percentage and time in or out of compliance.
2	Time out of Compliance	The longest, shortest and average time out of compliance.
3	Details	Details pertaining to compliance.
4	Print	Print Positioning Report <b>Print</b> on page 35.

#### **Positioning Report Printing Options**

When printing the *Positioning Report*, all items are printed and there are no options. See *Print* on page 35.

# Limit Analysis

The Limit Analysis Report allows the user ability to model changes in alarm limits and notification delays to view alternate scenarios.



Item	Feature	Description
1	Total Events	Displays total number of events based on user selections.
2	Total Notifications	Displays total number of notifications based on user event and notification limits and delay selections.
3	Scenario 1 Window	Displays Scenario 1 modeling information based on user event and notification limits and delay selections.
4	Parameter Event Settings	Allows user to modify high/low threshold, alarm limits, and alarm delay times for specific parameters for alternate scenario modeling.
5	Parameter Notification Settings	Allows user to modify delay times for each parameter notification, by notification level, for alternate scenario modeling.
6	Events Color Key	Displays high and low limit event colors for identification.
7	Duplicate Feature	Allows current scenario to be duplicated. This allows the user to select different event and notification limits and delays for comparisons. The duplicated scenario (Scenario 2) displays below Scenario 1.
8	Minimize/Expand Scenario Window	Allows the scenario window to be minimized or expanded.
9	Report Configuration	Select to display the <i>Limit Analysis Report</i> configuration options, which include selecting additional parameters and removing current parameters.
10	Print	Print Notification Report. See <b>Print</b> on page 35.

### Generate Limit Analysis Report

When selecting the *Limit Analysis Report* to view data, the user must first select parameters. Select from the following parameters in the *Report Configuration* window (up to 5 parameters), then select the **OK** button to continue to the *Limit Analysis Report* screen, or the **Cancel** button to cancel. In the example, Pi, PVi, PR and %SpO<sub>2</sub> have been selected.

	LIMIT ANALYSIS							
Report Conf	iguration							
	RRa	PVi	EMG	EtCO: RR	PSIF	✓ %SpO₂		
	FICO2	SpfO2	%SpCO	SpHb	SR SR	EtCO2		
2	Pi	%SpMet	✓ PR	SpOC SpOC				
			Cancel	ОК				

After selecting the desired parameters, Scenario 1 displays. Note that no events or notifications are shown.

	LIMIT ANALYSIS	🖶 Print
C Report Configuration		~
	Scenario 1	
	0	
	Events Notifications	
		Low Limit      High Limit
Scenario 1		=
		~
Low Limit High Limit Extra C	belay .	
		Total Events
		Total Events
Deiny	ч	
Initial		0
Escalation 1		Total Notifications
Re-Escalation 1		

To display events and notifications, select event and notification limits and delays for the parameters such as:

- Parameter Low and High limits.
- Extra delay for SpO<sub>2</sub> and RR on Masimo devices.
- Define time delay for displaying events.

Once selected, select the **Calculate** icon **Cancel** to display data or **Cancel** to cancel.

	Low Limit	High Limit	Extra Delay
PVi	10	10	
%SpO₂	39	39	
Pi	2	1	
PR	75	80	
			Delay
Initial			0 🔻
Escalation			1 🔻
Re-Escalation			1 🔻

Masimo Corporation

#### Data displays for the selected parameters based on the selections.



#### **Limit Analysis Report Printing Options**

When printing the Limit Analysis Report, the following items can be selected or deselected to print. See Print on page 35.

- Scenario Tools
- Scenario Details

# Patient Reports

Reports can be generated for a selected patient based on the selected date and time (see Selecting Patient Level Date and Time on page 24).

In the *Patient Details List* displayed when viewing the *Patient Report* on page 14, right-clicking on a patient row displays a pop-up box with the following options for reviewing data and generating reports:

- Patient Dashboard on page 23.
- Patient Event Report on page 25.
- Notification Report (Patient) on page 26.
- Trend Analysis on page 27.
- Desaturation Analysis on page 30.
- **Respiration Analysis** on page 32.
- Positioning Report (Patient) on page 34.

### Patient Header

The Patient Header displays at the top of the screen for all patient reports, with the exception of the patient report.

The image and table below describe the features of the *Patient Header*.



Item	Feature	Description	ltem	Feature	Description
1	Patient	Displays the patient name and label.	5	Patient Admission Timeline	Displays patient total monitoring timeline. See <i>Timeline View</i> within this section.
2	Patient Domain	Displays the domain the patient is part of.	6	Select a Patient Report	Allows access to different patient reports. See <i>Select a Report</i> within this section.
3	Patient Admit Date	Displays date and time patient monitoring began.	7	Report Range Date and Time Selection	Displays date and time range for displayed reports. Allows user to change date and time to modify and view patient reports. See <i>Selecting Patient Level Date and Time</i> on page 24.
4	Patient Admit Time	The total time the patient was monitored.			

### Timeline View

When all dates and time ranges for a patient are selected, the timeline displays as shown.

2019					
May	Jun	Jul	Aug	Sep	o
m 05/01/2019 6:00 PM - 10/01/20	019 12:00 AM 👻				Select a report 👻

When a specific date and time range is selected, only the range selected is highlighted as shown. See Selecting Patient Level Date and Time on page 24.



Note: The timeline does not print when printing patient reports.

### Select a Patient Report

From the Select a Report drop-down menu, all available patient reports can be accessed directly (similar to performing a right-click on a patient in the Patient Report):

- Patient Dashboard on page 23.
- Patient Event Report on page 25.
- Notification Report (Patient) on page 26.
- Trend Analysis on page 27.
- S Masimo Corporation

- Desaturation Analysis on page 30.
- **Respiration Analysis** on page 32.

# Patient Dashboard

The Patient Dashboard is accessed by performing a right-click on a patient in the Patient Report table. The following information describes the features of the Patient Dashboard screen.



ltem	Feature	Description	ltem	Feature	Description
1	Print	Allows the displayed information to be printed. See <b>Print</b> on page 35.	6	Total Events	Displays the total number of events for the patient. Click to view. See <b>Patient Event Report</b> on page 25.
2	Download Patient Data	Patient data is downloaded as a csv file. See <i>Download Patient Data</i> on page 35.	7	Total Notifications	Displays the total number of notifications for the patient. Click to view. See <b>Notification Report (Patient)</b> on page 26.
3	Events Pie Chart	Displays the number of events for the patient by type.	8	Devices Monitoring Patient	Displays the monitoring device information (Type, Device ID, Monitoring Duration* and Utilization).

Item	Feature	Description	ltem	Feature	Description
4	Notifications Pie Chart	Displays the number of notifications for the patient by type.	9	Patient Event List	Displays a list of patient events by type.**
5	Total Devices	Displays the total number of devices monitoring the patient.	10	Patient Notifications Details List	Displays a list of patient notifications by type.**

\* Usage percentage of the device over the duration of the patients admission.

\*\* The columns in the tables can be sorted by ascending or descending order.

#### Patient Dashboard Printing Options

When printing the Patient Dashboard, the following items can be selected or deselected to print. See Print on page 35.

- Pie Charts
- Totals Statistics
- Device Statistics
- Statistics

# Selecting Patient Level Date and Time

At the patient level, users can select the date and time range to view data and generate reports for a single patient. See *Patient Reports* on page 21. Default range options are available, as well as the ability to define a custom range.

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII															Select a report 👻
Tester	<		S	ep 20'	19		>			0	ct 20	19			
Today	Su	Мо	Tu	We	Th	Fr	Sa	Su	Мо	Tu	We	Th	Fr	Sa	
Vectorday	25	26	27	28	29	30	31	29	30	1	2	3	4	5	
resteriday	1	2	3	4	5	6	7	6	7	8	9			12	
Last 7 Days	8	9	10	11	12	13	14	13	14	15	16	17	18	19	
	15	16	17	18	19	20	21	20	21	22	23	24	25	26	
Last 30 Days	22	23	24	25	26	27	28	27	28	29	30	31	1	2	
This Month	29	30	1	2	3	4	5	3	4	5	6	7	8	9	
Last Month	0	•	C	, 00	•	00	•	0	•	C	00	•	00	•	
Custom range				-											
								CANCEL				0	K		

Clicking on the calendar directly switches to the **Custom Range** option. From there, select the desired date range, and if necessary, a time range below the calendar option (in hours, minutes and seconds).

ഈ 10/01/2019 12:00 AM - 10/01/2019 10:24 AM ▼																Selec	t a repor	t -
Today	< Su	Mo	A Tu	we we	19 Th	Er	> Sa		< Su	Мо	S Tu	ep 20	19 Th	Fr	<b>&gt;</b>			
	28	29	30	31	1	2	3		25	26	27	28	29	30	31			
Yesterday	4	5	6	7	8	9	10					4						
Last 7 Days	11	12	13	14	15	16	17											
	18	19	20	21	22	23	24								21			
Last 30 Days	25	26	27	28											28			
This Month									29	30	1	2	3	4	5			
Last Month				_	e.								e.					
Custom range	10	•	1	15	•	22	٠		10	۲	C	· 00	•	22	•			
								CANC	EL				o	К				

When a date and time range is selected, select the **OK** button to apply the range or **Cancel** to cancel the selection. The new date and time range displays in the *Report Range Date and Time Selection* on the *Patient Header*, and the reports generate for the selected range.

# Patient Event Report

The *Event Report* for the patient displays a pie chart broken out by Clinical, Non-Clinical, and Modifier Events, with the total number of events also displayed, for the specific patient. The tables below the chart provide details about patient events.



Item	Feature	Description
1	Patient Event Pie Chart/List	Visual/Numeric display of the number of events by type.
2	Total Patient Events	Total number of events.
3	Patient Event Details List	Event details grouped by Clinical, Non-Clinical, and Modifier.* Right-click on rows within the table to view available options. See <i>Event Details</i> for additional information.
4	Print	Print Patient Event Report. See <b>Print</b> on page 35.
5	Download Patient Data	Download patient data for additional use. See <b>Download Patient Data</b> on page 35.

\* The columns in the tables can be sorted by ascending or descending order.

#### **Event Details**

In the *Event* tables, right-clicking within a row displays a pop-up box with the option to view details for the selected patient event. See *View Patient Event Details* on page 26.

#### Patient Event Report Printing Options

When printing the Event Report, the following items can be selected or deselected to print. See Print on page 35.

- Events Statistics
- Clinical Events List
- Non-Clinical Events List
- Modifier Events List

# View Patient Event Details

When View Event Details is selected, the Events Report screen displays information for the selected event for the patient, listed by Start Time. In this example, the event is SpO<sub>2</sub> High.

The columns in the tables can be sorted by ascending or descending order.

			EVENT		Download Patient Data			
SpO₂ High								
Start Time	Stop Time	Patient ID	First Name	Last Name	Domain	Room	Device	Duration
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254001	Oliver	Kluth	default domain	301	Eagle	1m 0s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254001	Oliver	Kluth	default domain	301	Eagle	1m 3s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254001	Oliver	Kluth	default domain	301	Eagle	1m 2s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254001	Oliver	Kluth	default domain	301	Eagle	1m 0s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254001	Oliver	Kluth	default domain	301	Eagle	1m 0s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254001	Oliver	Kluth	default domain	301	Eagle	1m 0s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254001	Oliver	Kluth	default domain	301	Eagle	1m 23s
01/18/1970 4:33 PM	01/18/1970 4:33 PM	254001	Oliver	Kluth	default domain	301	Eagle	1m 0s
01/18/1970 4:33	01/18/1970 4:33							

#### **Patient Event Report Printing Options**

When printing the Patient Event Report, the following item can be selected or deselected to print. See **Print** on page 35.

• Events List

# Notification Report (Patient)

The Notification Report for the patient displays a pie chart broken out by Initial, Escalation, and Re-Escalation notifications, with the total number of notifications for the patient also displayed. The tables below the chart provide details for the patient notifications.



Item	Feature	Description
1	Patient Notification Pie Chart/List	Visual/Numeric display of the number of notifications for the patient by type.
2	Total Patient Notifications	Total number of notifications for the patient for all types.
3	Patient Notification Details List	Patient Notification details grouped by Initial, Escalation, and Re-Escalation.* See Initial, Escalation, and Re-Escalation Notifications.
4	Print	Print Notification Report. See <b>Print</b> on page 35.
5	Download Patient Data	Download patient data for additional use. See <b>Download Patient Data</b> on page 35.

\* The columns in the tables can be sorted by ascending or descending order.

#### Patient Notification Report Printing Options

When printing the Notification Report, the following items can be selected or deselected to print. See Print on page 35.

- Notification Statistics
- Initial Notification List
- Escalation Notification List
- Re-Escalation Notification List

# Trend Analysis

The *Trend Stats Report* displays Histogram and Trend information for each parameter monitoring the patient. When selecting the *Trend Stats Report* to view patient data, the user must first select the desired parameters for each device from the available options displayed. Default high and low thresholds for each parameter are displayed and can be modified as necessary. In the example, all parameters are selected for Root.

		TREND	STATS REPO	RT			
Report Configuration							
	Select All						
Root	RR RR	2 40	SpHb	2.7	17.9	V PVi	0 72
	SpO:	20 99	✓ Pi	0.02	3.48	SpMet	0.1 6.3
	✓ %SpfO₂	1 99	PR	53	92	CaO:	1 1
	✓ %SpCO	1 98	🖌 rS0: 1	90	95	✓ rS0= 2	88 92
	rSO: 3	95 99	🖌 rSO: 4	80	90		
	Select All						
BBraun Perfusor Space	Infusion Ra	0 1800	Volume To	0	9999.9	Infusion Pr	0 8
Infusion Pump	Syringe Size	0 60	Syringe Vol	0	60	Time Rema	0 65535
	Volume Inf	0 999.99	Infusion Ti	0	6000		
		Cancel	ок				

After selecting the applicable parameters, click the **OK** button to generate the *Trend Analysis Report*, or select **Cancel** to cancel.



Note: When Cancel is selected, the Trend Analysis Report screen displays, but with no data displayed.

ltem	Feature	Description
1	Device	Displays the device type. Multiple devices may be available to view.
2	Histogram/Trend	Displays the histogram and trend from the device data for the selected parameter. See <i>Histogram</i> on page 29 and <i>Trend</i> on page 29.
3	Report Configuration	Select to display the <i>Trend Analysis Report</i> configuration options for adding or removing parameters or changing high and low thresholds.
4	Print	Print Notification Report. See <b>Print</b> on page 35.
5	Download Patient Data	Download patient data for additional use. See <b>Download Patient Data</b> on page 35.

#### **Trend Analysis Report Printing Options**

When printing the Trend Analysis Report, the following items can be selected or deselected to print. See **Print** on page 35.

- Histograms
- Line Graphs

## Histogram

The *Histogram* field displays histogram information related to the patient both graphically and numerically for the selected parameter. In the example, SpO<sub>2</sub> is displayed.



Note: When multiple parameters are selected for the Trend Analysis Report, multiple histograms are displayed.

## Trend

The *Trend* field displays trend information related to the patient for the selected parameter. In the example, RR, SpHb, PVi, SpO<sub>2</sub>, Pi, %SpMet and %SpfO<sub>2</sub> are displayed.

Note: When multiple parameters are selected for the *Trend Analysis Report*, multiple trends are displayed.





Trend information can be viewed at intervals of 30 minutes or 1, 3, 6, 12, or 24 hours. To change the interval, select the interval menu (displayed at the top of the trend) and select the desired interval from the available options.

# **Desaturation Analysis**

The Desaturation Report displays desaturation event information for each device monitoring the patient. Desaturation events are based on SpO<sub>2</sub> measurements.

When selecting the Desaturation Report to view patient data, the user must first select Comprehensive or Deepest.

- **Comprehensive** Displays a list of all the desaturation events that meet the criteria based on the user defined Threshold (baseline for desaturation %) and Duration (length of desaturation event).
- **Deepest Desaturation** Displays the list of relatively deep desaturation(s) the patient has experienced, based on the user defined settings for Drop Percentage (percentage drop based on the baseline measured in the time window), Time Window (time length of moving time window of data in which desaturation is analyzed), Threshold (desaturation % that will generate a desaturation event for all scenarios regardless of drop percentage and time window) and Duration (length of time that the patient was below the desaturation % that generated the event).

When multiple devices are monitoring the patient, the user can select to run a *Desaturation Report* for one or multiple devices. In the example, the *Deepest Desaturation* option is selected, with only Radical-7 data available, and the Drop Percentage, Time Window, Threshold, and Duration are set.

	DESATURATIO	N REPORT	
eport Configuration			
Comprehensive			
Deepest Desaturation			
	Radica	17	
			_
- 3 +	- 1 +	- 89 +	- 30 +
	Cancel	ок	

#### Click the **OK** button to generate the *Desaturation Report*, or select **Cancel** to cancel.



ltem	Feature	Description
1	Device	Displays the device type. Multiple devices may be available to view.
2	Desaturation Count	Displays the the total number of desaturations on this device for the selected parameter while monitoring this patient.
3	Desaturation Graph	Displays the graph of desaturations on this device for the selected parameter while monitoring this patient.
4	Desaturation Report Details List	Displays details about the desaturations.*
5	Report Configuration	Select to display Desaturation Report configuration options.
6	Print	Print Notification Report. See <b>Print</b> on page 35.
7	Download Patient Data	Download patient data for additional use. See <b>Download Patient Data</b> on page 35.

\* The columns in the tables can be sorted by ascending or descending order.

#### Desaturation Report Printing Options

When printing the *Desaturation Report*, the following items can be selected or deselected to print. See **Print** on page 35.

- Graphs
- Details List

# **Respiration Analysis**

The *Respiration Report* displays respiration event information for each device monitoring the patient. Respiration events are based on respiration rate measurements.

When selecting the Respiration Report to view patient data, the user must first select Comprehensive or Deepest.

- **Comprehensive** Displays a list of all the respiration events that meet the criteria based on the user defined settings for Threshold (baseline for respiration %) and Duration (length of respiration event).
- **Deepest Respiration** Displays the list of relatively deep respiration event (s) the patient has experienced, based on the user defined settings for Drop Percentage (percentage drop based on the baseline measured in the time window), Time Window (time length of moving time window of data in which respiration event(s) is analyzed), Threshold (desaturation % that will generate a respiration event for all scenarios regardless of drop percentage and time window), and Duration (length of time that the patient was below the desaturation % that generated the event).

When multiple devices are monitoring the patient, the user can select to run a *Respiration Report* for one or both devices. In the example, the *Comprehensive* option is selected, with Root and Radical-7 data selected, and the Threshold and Duration are set.

Note: RRp is currently not available in the U.S.A. and territories relying on FDA market clearance.

Comprehensive				
		Radical7 © RRa © RRp	Root ® RRa	
	Threshold 1 - 12 - 10 +	0	Duration 3 - 120 se - 30 +	c
Deepest Respiration				





Item	Feature	Description
1	Device	Displays the device type. Multiple devices may be available to view.
2	Respiration Count	Displays the the total number of respirations on this device for the selected parameter while monitoring this patient.
3	Respiration Graph	Displays the graph of respirations on this device for the selected parameter while monitoring this patient.
4	Respiration Report Details List	Displays details pertaining to respiration.*
5	Report Configuration	Select to display Respiration Report configuration options.
6	Print	Print Notification Report. See <b>Print</b> on page 35.
7	Download Patient Data	Download patient data for additional use. See <b>Download Patient Data</b> on page 35.

\* The columns in the tables can be sorted by ascending or descending order.

#### **Respiration Report Printing Options**

When printing the *Respiration Report*, the following items can be selected or deselected to print. See *Print* on page 35.

- Graphs
- Details List

# Positioning Report (Patient)

The *Positioning Report* for the patient displays two pie charts for Compliance and Positions. The tiles below the charts provide details for the position report. The time in position data displays in trend view and in a table.



ltem	Feature	Description
1	Compliance Pie Chart	Visual display of the percentage in or out of compliance.
2	Positions Pie Chart	Visual display of the patients positions and percentage in each position.
3	Compliance/Position Details	Details pertaining to patients compliance and positions.
4	Time in Position - Trend	Trend view of patients positions and time in positions.
5	Time in Position - Table	Patient position details grouped by Position, Start, End, Duration, Time over Limit, Primary Response, Secondary Response.*
A		

Masimo Corporation

Item	Feature	Description	
6	Print	Print Positioning Report. See <b>Print</b> on page 35.	
7	Download Patient Data	Download patient data for additional use. See <b>Download Patient Data</b> on page 35.	

\* The columns in the tables can be sorted by ascending or descending order.

#### **Positioning Report Printing Options**

When printing the Positioning Report, all items are printed and there are no options. See Print on page 35.

# Download Patient Data

Patient data can be downloaded for all patient reports as a \*.csv file spreadsheet.

To download patient data, perform the following:

- Click the Download Patient Data text at the top of the patient report. 1.
- 2. When the dialog window opens, select a location to save the file. This location is determined by the user.
- 3. Click the Save button to save the file, or Cancel to cancel downloading.
- 4. The \*.csv file can then be opened from the saved location.

# Print

Iris Analytics has the ability to print any screen or report that displays the print icon 😨 Print. To print, perform the following:

- 📄 Print 1. Select the print icon on the screen
- Select the specific items to print from the available options. Options vary depending on the screen to be printed. Refer to the individual reports under *Chapter 3: Reports* on page 11 for details. In the following example, the *Dashboard* is used. 2.



Select the Print button to continue printing, or the Cancel button to cancel printing.

3. The *Print* window displays available options. Select the printer (destination) and desired options. In this example, the information will be printed to a PDF file.

9/30/2019 A IRIS AMALYTICS Terms	tris Analytics	Constituted By John Bon		Print	1 she	et of paper
846 T	DASHBOARD			Destination	Adobe PDF	•
	theor X			Pages	All	Ŧ
15	Total Devices Total Devices 12	5.514 Notifications 40		Color	Color	•
1Patent all head faces Faces Reading R	Peditare Laditare Volum lerm Read def Protein Dann Jina Las	800% 1027 1027 1027 1027 1027 1027 1027 1027		More settings		~
3601 Silv Facilitati Silv Facilitati Silv Facilitati Silv Facilitati Silv Facilitati Silv Facilitati	240x Evrol 2400 2400 2400 2400	1687 Tean Bal(24201153 10.867 Bal(24201153 10.867 Bal(24201153 10.867				
Борени Ворени	2400	Backballers & Dr. Ban Bachballers & M. Ban				
Viar https://10.1.21.53:7443/dashboard		Confidential Patient Information Printed on Sep 20, 2019 10-68 AM	1/1		Print	Cancel

Select the Print button to print, or the Cancel button to cancel printing.

#### **Reports Printing**

When printing population reports, the top of the page displays the user information only.

#### **Patient Reports Printing**

When printing patient reports, the top of the page displays the user information as well as the patient information, similar to the *Patient Header* information, with the exception that the timeline does not print. See **Patient Header** on page 21.

# Chapter 4: User Management

User Management is accessed through the User menu (1) in the upper right corner of the screen, next to the currently logged in user name.



Available options in the User Menu include:

- My Account See *My Account* on page 37.
- System Info See **System Info** on page 40.
- Logout See Logging Out of Iris Analytics on page 40.

## My Account

The *My Account* screen allows the user the ability to access their profile. After selecting *My Account*, go back to the user menu and select *Profile*. After selecting *Profile*, the *My Account* screen displays, allowing users to edit their account information or change their password.

Admin and Super Admin users can view and edit user accounts and application roles from this screen. See User Administration on page 37 for information.

### Edit Account

To edit account information, perform the following:

- 1. Select the **Edit** button.
- 2. Edit any available fields.
- 3. Select **Save** to save the edits or **Cancel** to exit without saving.

### Change Password

To change the password, perform the following:

- 1. Select the Change Password button.
- 2. Enter the current password in the *Old Password* field.
- 3. Enter a new password in the New Password fields.
- 4. Select Save to change the password or Cancel to exit without changing the password.

### Exit Profile/My Account Screen

To exit the My Account screen, under the user menu, select Back To: Iris Analytics.

## User Administration

Admin and Super Admin roles can access user information and application roles to make changes. After selecting My Account, links to User Accounts and Application Roles appear in the screen header.

### User Accounts

When selected, the User Accounts screen displays with all user information listed. Existing user account information can be edited or deleted, or new user accounts can be created. See **User Accounts** on page 38.

### **Application Roles**

When selected, the *Application Roles* screen displays with all enabled applications listed. Application roles can be edited from this screen. See *Application Roles* on page 38.

# User Accounts

When selected, the User Accounts screen displays. All existing users display along with designated application roles, status, and last time logged into Iris Analytics. From this screen, existing user information can be edited and new users can be added.

### Edit Account

The *Edit Account* screen can be displayed by selecting the edit icon **a** in the user information row.

From the Edit Account screen:

- The user can have access to Iris Analytics enabled or disabled.
- The user role can be modified. See User Roles on page 38.
- Any field with the edit icon 🖉 can be modified.
- The user can be deleted from Iris Analytics.

When finished, select Save to save the changes or Cancel to exit without saving the changes. Iris Analytics will return to the Edit Account screen.

### Create Account

New user accounts are created from the User Accounts screen. Select the Create Account button and perform the following:

- 1. Select a username and password.
- 2. Enter the user's first and last names.
- 3. Select a User Management role.
- 4. Select an Iris Analytics role.
- 5. Select Save to create the new account or Cancel to exit without creating a new account. Iris Analytics will return to the Edit Account screen.

### **Application Roles**

When selected, the *Application Roles* screen displays. All enabled applications display along with designated application roles. From this screen application roles can be edited.

### Edit Application

The *Edit Application* screen can be displayed by selecting the edit icon *mathematication* in the Application row.

From the *Edit Application* screen:

- The application can be Enabled or Disabled.
- The application role can be modified. See *User Roles* on page 38.
- Any field with the edit icon Z can be modified.

When finished, select Save to save the changes or Cancel to exit without saving the changes. Iris Analytics will return to the Edit Application screen.

# User Roles

The user roles determine the level of functionality each user has access to. Roles are assigned when a new user is created and can be changed. See **User Administration** on page 37. User roles and definitions vary by application.

# Iris Analytics

Role	Description
USER	The default/base role to manage user's own user account.
PATIENT_REVIEWER	A user who can view all reports except for Limit Analysis.
ADMIN	The admin for the application, with access to most features.
SUPER_ADMIN	The super administrator for the application, with access to all features.

Role	Description
No Role Selected	Defaults to USER role.

Privilege	Description	USER	PATIENT_REVIEWER	ADMIN	SUPER_ADMIN
SYSTEM DASHBOARD Access to the System Dashboard		Х	Х	Х	Х
SYSTEM_PATIENT_REPORT	Access to the Patient Report	Х	Х	Х	Х
SYSTEM_EVENT_REPORT	Access to the Event Report Access to the Event Details Report	Х	Х	Х	Х
SYSTEM_NOTIFICATION_REPORT	Access to the Notification Report	Х	Х	Х	Х
SYSTEM_DEVICE_REPORT	Access to the Device Report	Х	Х	Х	Х
SYSTEM_LIMIT_ANALYSIS	Access to the Limit Analysis Report			Х	Х
PATIENT_DASHBOARD	Access to a patient's Dashboard		Х	Х	Х
PATIENT_EVENT_REPORT	Access to a patient's Event Report Access to a patient's Event Details Report		Х	Х	Х
PATIENT_NOTIFICATION_REPORT	Access to a patient's Notification Report		Х	Х	Х
PATIENT_TREND	Access to a patient's Trend Analysis		Х	Х	Х
PATIENT_DESATURATION	Access to a patient's Desaturation Analysis		Х	Х	Х
PATIENT_RESPIRATION	Access to a patient's Respiration Analysis		Х	Х	Х
PATIENT_DATA_DOWNLOAD	Access to a patient's data download		Х	Х	Х
System Info	View Iris Analytics System Info				Х

# User Management

Role	Description
USER	The default/base role to manage user's own user account.
ADMIN	The admin for the application, with access to most features.
SUPER_ADMIN	The super administrator for the application, with access to all features.
No Role Selected	Defaults to USER role.

Privilege	Description		ADMIN	SUPER_ADMIN
SELF_MANAGEMENT	Access to the User Profile View	Х	Х	Х
USER_VIEW	Access to the User List View		Х	Х
USER_MANAGEMENT	<ul> <li>Access to the User List View</li> <li>Access to the Edit User View</li> <li>Access to the Add User View</li> </ul>		Х	Х
USERROLE_VIEW	Access to the Application-Role List View		Х	Х
USERROLE_MANAGEMENT	<ul> <li>Access to the Application-Role List View</li> <li>Access to the Edit Application-Role View</li> <li>Access to the Add Application-Role View</li> </ul>		Х	Х
APPLICATION_VIEW	Access to the Application List View		Х	Х
APPLICATION_MANAGEMENT	<ul> <li>Access to the Application List View</li> <li>Access to the Edit Application View</li> </ul>			Х

# System Info

The System Info screen displays information about Iris Analytics that includes, but is not limited to, the following:

- Iris Analytics Version
- Iris Analytics Host IP Address
- Aggregator Status
- Batch Status
- Available Disk Space
- Total Disk Space

This information is read-only and cannot be configured by the user.

# Logging Out of Iris Analytics

Follow the instructions below to log out of a user account.

- 1. Select the *User Menu* next to the logged in user name in the upper-right corner of the screen to log out of Iris Analytics. See *Chapter 4: User Management* on page 37.
- 2. After successfully logging out, the Login screen will appear. To log in to a user account, see Logging in to Iris Analytics on page 9.

# Chapter 5: Messages

# Messages

Symptom	Potential Causes	Next Steps	
Incorrect username or password	Displayed when attempting to login and the username or password are incorrect.	Verify user id and/or password are correct and try again.	
Authentication Service Not Available	Displayed when attempting to login and the authentication service has an exception.	Contact the system administrator.	
Your password has expired	Displayed when attempting to login and the user's account has been flagged to change password.	<ul> <li>Change password as instructed.</li> <li>Contact the system administrator if password cannot be changed.</li> </ul>	
You must change your password	Displayed when the user logs into the system for the first time, and the user's password needs to be setup.	Change password as instructed.	
Session timeout	Displayed when the user's web session has timed out.	Log back in to start a new session.	
No Data Available	Displayed when there is no data available for any component.	Adjust report settings configuration.	
The range provided is invalid	Displayed if the user provides an invalid time range	Enter a valid time range.	
A system error occurred	Displayed if an internal error occurs	Contact Masimo Technical Support. See <b>Chapter 8:</b> <b>Service and Warranty Information</b> on page 47.	
Invalid parameter '{}'	Displayed if an invalid device parameter is given	Enter a valid device parameter.	
() must be positive	Displayed if the user enters a negative or zero value in a field which must be positive	Enter a positive value into the field.	
() must be positive or zero	Displayed if the user enters a negative value in a field which must be positive or zero	Enter zero (O) or a positive value into the field.	
The limits provided are invalid	Displayed if the limit analysis request is given an invalid high or low limit	Enter valid high or low limits only.	
License key for this service cannot be found. System functionality will be disabled after [MMM DD, YYYY   HH:MM AM/PM]	Displayed when the server key dongle is removed, but still within the grace period	To continue using Iris Analytics after the date displayed, attach a server dongle key.	
Server key is not available	Displayed when the server key dongle is removed, and is beyond the grace period	To continue using Iris Analytics, attach a server dongle key.	
Low disk space. Please contact your administrator	Displayed when disk space is low.	Contact system administrator.	

# Troubleshooting the Iris Analytics

The following section lists possible symptoms, the potential cause, and next steps.

Symptom	Potential Causes	Next Steps			
Cannot login to user account	<ul> <li>User not found</li> <li>Incorrect Password</li> <li>No network connection</li> <li>User is dischlad</li> </ul>	<ul> <li>Verify user id is correct and try again.</li> <li>Ensure the correct user password is used.</li> <li>Ensure the Iris Analytics equipment is connected to a network and communicating.</li> <li>Contact the Iris Analytics administrator.</li> </ul>			
		<ul> <li>If the issue continues, contact the network administrator.</li> </ul>			

# Chapter 7: Specifications

# Minimum System Requirements

Requirement	Details
Operating System	Red Hat 7.6
CPU	Quad-Core CPU, 1.80 GHz
RAM	16 GB
HDD	2 TB

# Supported Browsers

Platform
Google Chrome
Firefox
Microsoft Edge

# Supported Virtual Machines

Name	Version			
VMWare	v5.5, v6.0, v6.7			

# Supported Systems

System	Minimum Software Version				
Patient SafetyNet	v5715				
Iris Gateway	v1619				

# Supported Languages

Language	Language and Locale Code	
English	en_US	

# Default Account Information

Username	Password	Role
serviceadmin	MasimoUM2019!	Super Admin

# Symbols

Symbols	Definition
	Follow Instructions for use
NON	Non-Sterile
	Not made with natural rubber latex
affu indicato.	Instructions/Directions for Use/Manuals are available in electronic format @http://www.Masimo.com/TechDocs Note: eIFU is not available in all countries.

# Masimo Technical Services

To contact Masimo Technical Services, refer to the Masimo Technical Services web page:

http://www.masimo.co.uk/company/global-services/technical-services/

# Contacting Masimo

Masimo Corporation 52 Discovery Irvine, California 92618

Tel:+1 949 297 7000 Fax:+1 949 297 7001

# Limited Warranty

Masimo warrants to the initial buyer only that these products, when used in accordance with the directions provided with the Products by Masimo, will be free of defects in materials and workmanship for a period of six (6) months. The foregoing is the sole and exclusive warranty applicable to the products sold by Masimo to buyer. Masimo expressly disclaims all other oral, express or implied warranties, including without limitation any warranties of merchantability or fitness for particular purpose. Masimo's sole obligation and buyer's exclusive remedy for breach of any warranty shall be, at Masimo's option, to repair or replace the product.

## Exclusions

The warranty does not apply to any non-Masimo branded product or any software, even if packaged with the Product, or any Product that was: (a) not new or in its original packaging when supplied to purchaser; (b) modified without Masimo's written permission; (c) supplies, devices, or systems external to the Product; (d) disassembled, reassembled, or repaired by anyone other than a person authorized by Masimo; (e) used with other products, like new sensors, reprocessed sensors, or other accessories, not intended by Masimo to be used with the Product; (f) not used or maintained as provided in the operator's manual or as otherwise provided in its labeling; (g) reprocessed, reconditioned, or recycled; and (h) damaged by accident, abuse, misuse, liquid contact, fire, earthquake or other external cause.

No warranty applies to any Product provided to Purchaser for which Masimo, or its authorized distributor, is not paid; and these Products are provided AS-IS without warranty.

# Limitation of Warranty

Except as otherwise required by law or altered by the purchase agreement, the above warranty is the exclusive warranty that applies to the Product and software media, and Masimo does not make any other promises, conditions, or warranties regarding the Product. No other warranty applies, express or implied, including without limitation, any implied warranty of merchantability, fitness for a particular purpose, satisfactory quality, or as to the use of reasonable skill and care. See the licensing terms for the terms and conditions that apply to and Software accompanying the Product. Additionally, Masimo will not be liable for any incidental, indirect, special, or consequential loss, damage, or expense arising from the use or loss of use of any Products or Software. In no event shall Masimo's liability arising from any Product or Software (under contract, warranty, tort, strict liability, or otherwise) exceed the amount paid by purchaser for the Product or Software. The above limitations do not preclude any liability that cannot legally be disclaimed by contract.

# Sales & End-User License Agreement

This document is a legal agreement between you ("purchaser") and Masimo Corporation ("Masimo") for the purchase of this Product ("Product") and a license in the included or embedded Software ("Software") except as otherwise expressly agreed in a separate contract for the acquisition of this Product, the following terms are the entire agreement between the parties regarding your purchase of this Product. If you do not agree to the terms of this agreement, promptly return the entire Product, including all accessories, in their original packages, with your sales receipt to Masimo for a full refund.

### Restrictions

- Copyright Restrictions: The Software and the accompanying written materials are copyrighted. Unauthorized copying of the Software, including Software that has been modified, merged, or included with other software, or the written materials is expressly forbidden. Purchaser may be held legally responsible for any copyright infringement that is caused or incurred by Purchaser's failure to abide by the terms of this Agreement. Nothing in this License provides any rights beyond those provided by 17 U.S.C. §117.
- Use Restrictions: Purchaser may physically transfer the Product from one location to another provided that the Software is not copied. Purchaser may not electronically transfer the Software from the Product to any other device. Purchaser may not disclose, publish, translate, release, distribute copies of, modify, adapt, translate, reverse engineer, decompile, disassemble, or create derivative works based on the Software or the written materials.
- 3. Transfer Restrictions: In no event may Purchaser transfer, assign, rent, lease, sell, or otherwise dispose of the Product or the Software on a temporary basis. Purchaser shall not assign or transfer this License, in whole or in part, by operation of law or otherwise without Masimo's prior written consent; except that the Software and all of Purchaser's rights hereunder shall transfer automatically to any party that legally acquires

title to the Product with which this Software is included. Any attempt to assign any rights, duties or obligations arising hereunder other than as set forth in this paragraph shall be void.

4. U.S. Government Rights: If Purchaser is acquiring Software (including the related documentation) on behalf of any part of the United State Government, the following provisions apply: the Software and documentation are deemed to be "commercial software" and "commercial computer software documentation," respectively pursuant to DFAR Section 227.7202 FAR 12.212, as applicable. Any use, modification, reproduction, release, performance, display or disclosure of the Software (including the related documentation) by the U.S. Government or any of its agencies shall be governed solely by the terms of this Agreement and shall be prohibited except to the extent expressly permitted by the terms of this Agreement.

# Appendix

# Iris Analytics Virtual Machine Download and Installation

This procedure is to assist the user in installing and setting up a Virtual Machine for Iris Analytics on a host device.

### Virtual Machine Installation Procedure

#### Download the Virtual Machine from the USB

- 1. Remove the USB drive from the packaging and plug the USB onto a computer.
- 2. Locate the Iris Virtual Machine file (.ova file).
- 3. Save the file to the computer in a location that can be easily found later in this procedure.

#### Import VM into VSphere

1. Follow the instructions in the vSphere documentation for importing OVA file.

**NOTE:** Search topic: Deploying a Virtual Machine from an OVF or OVA File in the VMware Host Client on https://docs.vmware.com/en/VMware-vSphere/index.html

#### Modify any Additional Settings

1. Depending on the environment, modify any other settings on the VM.

NOTE: The CPU and Memory requirements of the VM are necessary. If these are modified, performance of the system is not guaranteed

#### Power on the VM

1. From the VM settings screen, select the *Power On* button.

#### Configure Static IP Address (Optional)

- 1. From the VM Console tab, click on the console screen.
- 2. Hit any key to continue. The following screen displays:

```
Red Hat Enterprise Linux
Kernel 3.10.0-957.21.2.el7.x86_64 on an x86_64
```

localhost login: \_

- 3. Login using the following default credentials.
  - 1. User: configip
  - 2. Password: configme
- 4. Follow the on-screen instructions to set the IP address:

**Note:** Type *exit* at any time to leave the IP configuration.

1. Upon login, the user should see the following screen. Type 'y' and hit Enter on the keyboard to proceed.

Current n	network settings					
eth0	Link encap:Ethernet HWaddr 00:0C:29:18:B3:C7					
	inet addr:10.1.40.120 Bcast:10.1.40.255 Mask:255.255.255.0					
	inet6 addr: fe80::20c:29ff:fe18:b3c7/64 Scope:Link					
	UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1					
	RX packets:116 errors:0 dropped:0 overruns:0 frame:0					
	TX packets:11 errors:0 dropped:0 overruns:0 carrier:0					
	collisions:0 txqueuelen:1000					
	RX bytes:7754 (7.5 KiB)  TX bytes:678 (678.0 b)					
Would you	llike to change the ip address? (enter exit to leave): _					

2. For the IP address, type in the static ip address as instructed, and hit Enter on the keyboard.

Enter IP address in dotted-decimal format (ex 192.168.1.120). Press enter to leave unchanged:

3. For the subnet mask, type in the subnet mask as instructed, and hit *Enter* on the keyboard.

Enter	subnet	mask	in	dotted	decimal	format	(ex	255.255.255.0).
Press	enter ·	to lea	ve	unchanç	ged :			

4. For the gateway, type in the gateway as instructed, and hit *Enter* on the keyboard.

Enter gateway IP address in dotted decimal format (ex 255.255.255.0). Press enter to leave unchanged:

- 5. Confirm the changes to the network settings. The updated settings will be applied.
- 6. The screen returns to the initial screen and displays the new network settings.

#### Send IP Address to Masimo Service team

1. Email the configured IP address to the Masimo Services team Project Manager.

#### Connecting KEYLOK with VM for license management

- 1. Plug the KEYLOK into the host device where the VM is installed.
- 2. Follow the instructions in the vSphere documentation for adding a USB device to the VM.

# Index

# A

About This Manual • 5 Appendix • 49 Application Roles • 37, 38

### С

Change Password at First Login • 9 Chapter 1 Description • 7 Chapter 2 Operation • 9 Chapter 3 Reports • 8, 11, 35 Chapter 4 User Management • 8, 9, 37, 40 Chapter 5 Messages • 41 Chapter 6 Troubleshooting • 43 Chapter 7 Specifications • 45 Chapter 8 Service and Warranty Information • 41, 47 Cleaning and Service Warnings and Cautions - 5 Compliance Warnings and Cautions • 5 Contacting Masimo • 47

# D

Default Account Information • 9, 45 Desaturation Analysis • 21, 23, 30 Device Report • 7, 12, 17 Download Patient Data • 23, 25, 27, 28, 31, 33, 35

# E

Event Report • 7, 12, 15 Exclusions • 47

### Η

Histogram • 28, 29

Intended Use • 5 Iris Analytics • 38 Iris Analytics Dashboard • 7, 8, 9 Iris Analytics Screen Header and Footer • 7, 8 Iris Analytics Virtual Machine Download and Installation • 49

Limit Analysis • 12, 19 Limitation of Warranty • 47 Limited Warranty • 47 Logging in to Iris Analytics • 9, 40 Logging Out of Iris Analytics • 9, 37, 40

#### М

Masimo Technical Services • 47 Messages • 41 Minimum System Requirements • 45

S Masimo Corporation

#### My Account • 37

### Ν

Notification Report • 7, 12, 16 Notification Report (Patient) • 21, 22, 23, 26

### Ρ

Patient Dashboard • 21, 22, 23 Patient Event Report • 21, 22, 23, 25 Patient Header • 21, 36 Patient Report • 7, 12, 14, 21 Patient Reports • 11, 14, 21, 24 Performance Warnings and Cautions • 5 Population Reports • 11, 12 Positioning Report (Patient) • 21, 34 Positioning Report (Population) • 12, 18 Print • 7, 8, 14, 15, 16, 17, 18, 19, 21, 23, 24, 25, 26, 27, 28, 31, 33, 35 Product Description and Key Features • 5 Product Description, Key Features, and Intended Use • 5

### R

Respiration Analysis • 21, 23, 32 Restrictions • 47

# S

Safety Information, Warnings and Cautions • 5 Sales & End-User License Agreement • 47 Selecting Date and Time • 7, 12, 13 Selecting Patient Level Date and Time • 21, 22, 24 Server/Domain Selection • 7, 11, 12 Supported Browsers • 9, 45 Supported Languages • 45 Supported Systems • 45 Supported Virtual Machines • 45 Symbols • 46 System Info • 8, 37, 40

Trend • 28, 29 Trend Analysis • 21, 22, 27 Troubleshooting the Iris Analytics • 43

### U

User Accounts • 37, 38 User Administration • 37, 38 User Management • 39 User Roles • 38

#### V

View Event Details • 15, 16 View Patient Event Details • 25, 26 Virtual Machine Installation Procedure • 49



300734/LAB-10429C-1021