

Whole-body X-ray CT System

# **SCENARIA View**

Product Specification



**FUJIFILM Healthcare Corporation**

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## 1. Product Overview

### General Description

Delivers a superb view.

FUJIFILM Healthcare Corporation's CT continues its evolution for all doctors, operators and patients.

Driving you ahead with SCENARIA View.

### Next-generation iterative approximation processing

FUJIFILM Healthcare Corporation's "Intelli IPV\*" next-generation iterative approximation processing is one of the image reconstruction techniques that reduce the noise in the projection and image space based on a high-precision statistical model by an iterative processing. This is made possible without the need for a dedicated operation room or additional hardware.

\*IPV : Iterative Progressive reconstruction with Visual modeling

### Sharp reduction of the examination time

We aimed to reduce the time by segmenting and optimizing the flow of the procedures of CT imaging. In particular, we reduced the time by shortening operation which have a huge burden on operators.

The complicated work of cardiac CT imaging is automated. Clear cardiac images are provided with simple examination.

### Achieved smooth operation and comfortable scanning

For patients who undergo regular scanning and to reduce burdens on small children, a scanning space which is friendly to both the operator and patient has been realized.

## SCENARIA View Specification

Configuration

### 2. System Configuration

Standard configuration

- |                         |   |   |                                   |
|-------------------------|---|---|-----------------------------------|
| 1. Scanner gantry       | : | 1 |                                   |
| 2. Patient table        | : | 1 |                                   |
|                         |   |   | (CT-WT-22)                        |
| 3. Operator's console   | : | 1 |                                   |
|                         |   |   | Console unit                      |
|                         |   |   | DVD drive                         |
|                         |   |   | 24-inch LCD monitor               |
|                         |   |   | Intercom                          |
|                         |   |   | Keyboard                          |
|                         |   |   | Mouse                             |
| 4. Standard accessories | : |   |                                   |
|                         |   |   | Gantry monitor (Touch Vision) 1   |
|                         |   |   | Breath-Navi display 1             |
|                         |   |   | Foot switch 1                     |
|                         |   |   | Patient mat 1                     |
|                         |   |   | Immobilizing bands 1set           |
|                         |   |   | Flap with slide rails 1set        |
|                         |   |   | Head rest 1 (Flat type) 1         |
|                         |   |   | Head band 1 1                     |
|                         |   |   | Chin band 1 1                     |
|                         |   |   | Triangle mattress 1               |
|                         |   |   | Foot mat 1                        |
|                         |   |   | Arm rest 1 (for HF) 1             |
|                         |   |   | Head rest 2 (for Arm rest 1) 1    |
|                         |   |   | Speaker (for CT room) 1           |
|                         |   |   | Instruction manual 1set           |
| 5. Standard functions   | : |   |                                   |
|                         |   |   | Normal scan                       |
|                         |   |   | Volume scan                       |
|                         |   |   | Dynamic scan                      |
|                         |   |   | Predict scan                      |
|                         |   |   | Preview scan                      |
|                         |   |   | Orbital synchronized scan         |
|                         |   |   | IntelliEC (Auto exposure control) |
|                         |   |   | IntelliEC Plus                    |
|                         |   |   | (Auto exposure control with IP)   |

## SCENARIO View Specification

Quick Entry  
AutoPose  
Dose Check  
CORE Plus  
Intelli IP Advanced  
Fine Recon  
HiMAR (Metal Artifact reduction)  
HiMAR Plus (Metal Artifact reduction)  
Remote home position  
Eco mode  
DICOM 3.0 output / DICOM print  
DICOM Query/Retrieve  
DICOM Dose SR  
Simple Dose Report  
(Secondary capture image)  
DICOM MWM<sup>※1</sup>  
Viewer for media (CD/DVD)  
MPR/3D  
CEV-CPR  
Remote Service  
Data Security<sup>※2</sup>

※1 MWM : Modality Worklist Management

※2 Compatible with NEMA XR-26 「Access Controls for Computer Tomography」

## SCENARIA View Specification

### Options

1. Lateral slide patient table (CT-WT-23)<sup>※3</sup>
2. 84kW Generator (including X-ray tube)<sup>※3</sup>
3. Chin rest (for Arm rest 1)
4. Arm rest 2 (for FF)
5. Spacer 1 (5°)
6. Spacer 2 (10°)
7. Head band 2 (1,120mm)
8. Chin band 2 (1,140mm)
9. Extended tabletop<sup>※3</sup>
10. Touch switch (for Extended tabletop)<sup>※3</sup>
11. Foot mat (for Extended tabletop)<sup>※3</sup>
12. IV drip pole
13. Wrist band
14. Phantom for Quality Exam (Water, QA)
15. UPS for console
16. External stands microphone
17. Intelli IPV<sup>※4</sup>
18. ECG scan package<sup>※5</sup>
  - CardioConductor
  - CardioHarmony
  - IntelliEC Cardiac
  - (ECG dose modulation)

※3 Factory installed option

※4 Iterative Progressive reconstruction with Visual modeling

※5 Compatible ECG monitors for SCENARIA View are below.

(1) Ivy Biomedical Systems, Inc.: Model 3000H

(2) Ivy Biomedical Systems, Inc.: Model 7800H

(3) Nihon Kohden Corp.: BSM-3000 series

Please make sure to use the connecting cable provided by ECG monitor company.

(The connecting cable of Nihon Kohden Corp. is optional.)

# SCENARIA View Specification

## Options for scanning

1. Injector Synchronization<sup>※6</sup>
2. Injector connection cable
3. Shuttle scan
4. Dual energy scan
5. guideShot

※6 Compatible CT Injectors for SCENARIA View are below.

	Manufacturer	Product name	CT synchronization kit	CAN/WIRE
(1)	Bayer Medical Care Inc.	MEDRAD Stellant CT Injection System D with Certegra Workstation	STELLANT D + ISI900 synchronization kit	CAN
(2)	Nemoto Kyorindo co., Ltd	DUAL SHOT a7	DUAL SHOT a7 + synchronization kit	WIRE
(3)	Imaxeon Pty Ltd.	Salient (Dual)	Salient + ISI700 synchronization kit	WIRE
(4)	Bayer Medical Care Inc.	MEDRAD Centargo CT Injection System	Centargo + ISI2 synchronization kit	CAN
(5)	ulrich GmbH & Co.KG	CT motion	CT motion + synchronization kit	CAN

## Options for image processing & DICOM

1. Hyper Q-Net V<sup>※7</sup> (Network-compatible Image analysis software)
2. fatPointer (Body fat analysis software)<sup>※8</sup>
3. riskPointer (LAA analysis software)<sup>※8</sup>
4. Calcium Scoring<sup>※8</sup>
5. DICOM MPPS (including IHE/SWF)<sup>※9</sup>

※7 This includes software only, and PC(Windows 10 Pro - 64bit type) shall be procured by customer.

※8 fatPointer, riskPointer and Calcium Scoring can be used in Hyper Q-Net V environment only.

※9 MPPS : Modality Performed Procedure Step

IHE/SWF : Integrating the Healthcare Enterprise/Scheduled Workflow

## SCENARIA View Specification

### 3. Specification

#### Scanner gantry

1. Object for scanning : Whole body including head
2. Scanning system : Continuous rotation system  
(Rotate/Rotate+Offset detector system)
3. Scanning time : 0.35, 0.4, 0.5, 0.75, 1.0, 2.0sec
4. Gantry opening : 800mm
5. Gantry tilt angle : ±30 degree
6. Setting scan position : Laser marker
7. Max number of slices : 128slices
8. Effective field of view (FOV) : 500mm

#### X-ray generator/ Detector

1. X-ray generation : Continuous X-rays
2. X-ray tube : 7.5MHU
3. Maximum output : 72kW (600mA@120kV), 100kVA  
84kW<sup>※10</sup> (700mA@120kV), 100kVA
4. Tube voltage : 80, 100, 120, 140kV
5. Tube current : 10~600mA / 10~700mA<sup>※10</sup>
6. Number of elements : 56,832 elements
7. Detector : 0.625mm x 64rows

※10 84kW Generator option

#### Patient table

1. Type of table : Patient table (CT-WT-22)      Lateral slide patient table (CT-WT-23)
2. Material of tabletop : Carbon fiber
3. Tabletop height : 490~970mm
4. Max. scannable range @ Normal Scan : 1,750 mm / 2,000 mm<sup>※11</sup>
5. Lateral slide travel : -      ±100mm
6. Maximum load (Supportable load) : 250kg / 220kg<sup>※11</sup>

※11 When Extended tabletop is used.

## SCENARIA View Specification

### Scanning system

1. Scanogram
  - Scannable range : 1,750mm
2. Normal scan
  - Scan time : 0.35, 0.4, 0.5, 0.75, 1.0, 2.0sec
  - Image slice thickness : 0.625, 1.25, 2.5, 5.0, 10.0mm
  - View rate : 2,880view/sec
3. Dynamic scan
  - Scan time : 0.35, 0.4, 0.5, 0.75, 1.0, 2.0sec
  - Image slice thickness : 0.625, 1.25, 2.5, 5.0, 10.0mm
  - View rate : 2,880view/sec
4. Volume scan
  - Scan time : 0.35, 0.4, 0.5, 0.75, 1.0sec
  - Image slice thickness : 0.625, 1.0, 1.25, 2.5, 3.75, 5.0, 7.5, 10.0mm
  - View rate : 2,880view/sec
  - Beam pitch : 0.578, 0.828, 1.078, 1.328, 1.578 (@ 40mm collimation)  
0.594, 0.844, 1.094, 1.344, 1.594 (@ 20mm collimation)
  - Reconstruction method : CORE Plus (Cone-beam Reconstruction)

### Image display/process

1. Central image processing unit : Multi-processor system
2. Magnetic disk unit
  - Image : over 2TB, over 600,000images
  - RawData : over 3TB, over 6,000scans
3. Archival storage : DVD drive (CD-R, DVD-R)  
About 7,000images (4.7GB DVD)
4. Image display
  - Display matrix : 1,920 x 1,200
  - Reconstruction matrix : 512 x 512
  - Display gray scale : 256 levels
  - Window level : -2,000~+4,000 (Standard)  
-32,768~+32,767 (Extended)
  - Window width : 1~6,000 (Standard)  
1~32,767 (Extended)



## SCENARIO View Specification

Specification

5. Image processing
- Window process : Window level / Width adjustment
  - : Black/white contrast reversal
  - Image display process : Multi frame display
  - : Magnification (real-time etc.)
  - : Image rotation
  - : Pan
  - : Data display
  - : Edge enhancement/smoothing
  - Image analysis process : Distance and angle measurement
  - : Setting ROI
  - : Scale display
  - : Comment display
  - : Save image
  - MPR image display : MPR (AXL, SAG, COR)
  - : Curved MPR
  - : Multi slice MPR
  - : Radial slice MPR
  - : SPINE Mode MPR
  - : MIP, MinIP, RaySum display<sup>※12</sup>
  - 3D image display : Volume rendering
  - : MIP, MinIP, RaySum display<sup>※12</sup>
  - : Mask extraction and edit
  - : Mask calculation
  - CEV-CPR : Cruising Eye View (CEV)
  - : CPR (Straight view, Natural view)
  - : Cross-sectional area / diameter
  - : CT color display of vessels

※12 MIP : Maximum Intensity Projection

MinIP : Minimum Intensity Projection

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### 4. Environmental requirements

#### Temperature

Scanner room : 20~28°C (not in use:-5~33°C)

Operation room : 10~28°C (not in use:-5~33°C)

Degree of humidity : 35~80%

#### Atmospheric pressure and altitude

700~1,060hPa, below 3,000m

#### Mean heat dissipation

Scanner room : 4,100W (3,525kcal/h)

Operation room : 380W (327kcal/h)

#### Standard installation space

26 m<sup>2</sup>

- ※ In the service environment, the concentration of corrosive gas must be 0.1ppm or less and salt damage must be 0.02mg/cm<sup>2</sup> or less.
- ※ The measurement conditions of mean heat dissipation are 240 scans/hour with 120kV, 400mA and continuous 40 scans x 0.5 sec.

### 5. Power supply facility

Mains voltage : 3phase 380VAC/400VAC

Mains frequency : 50/60Hz

Power supply capacity : 100kVA

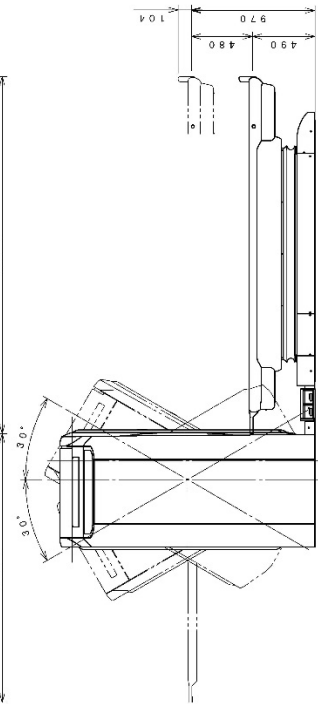
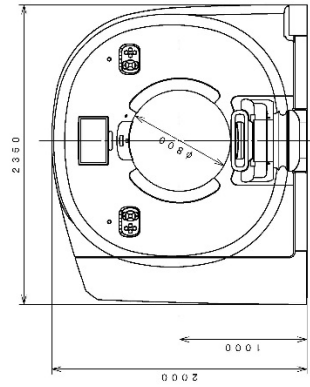
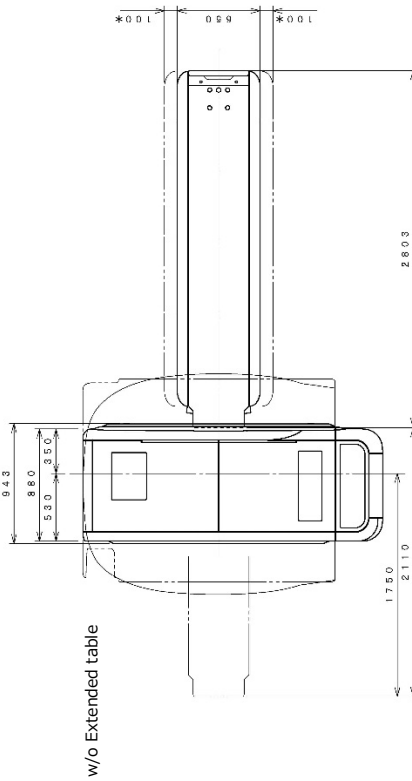
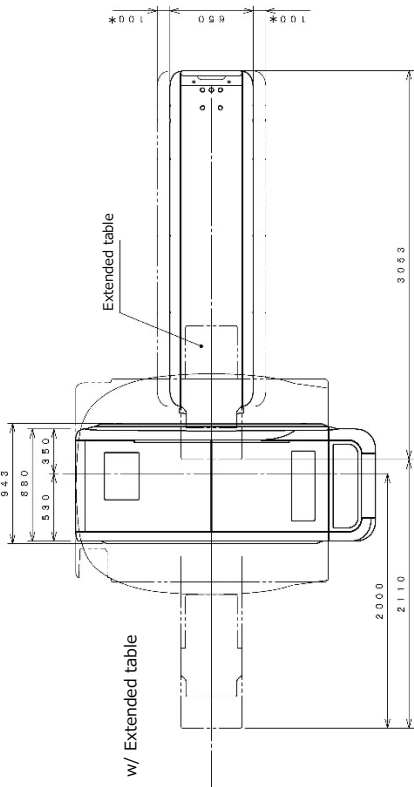
Grounding resistance : 10Ω or less

### 6. Outside dimension and mass

Name of component	Width (mm)	Depth (mm)	Height (mm)	Mass (kg)
Scanner gantry	2,350	943	2,000	2,220
Patient table (CT-WT-22/23)	650	2803	490~ 970	500
Operator's console (Main unit)	421	745	606	73.4

## 7. Dimensions of system units

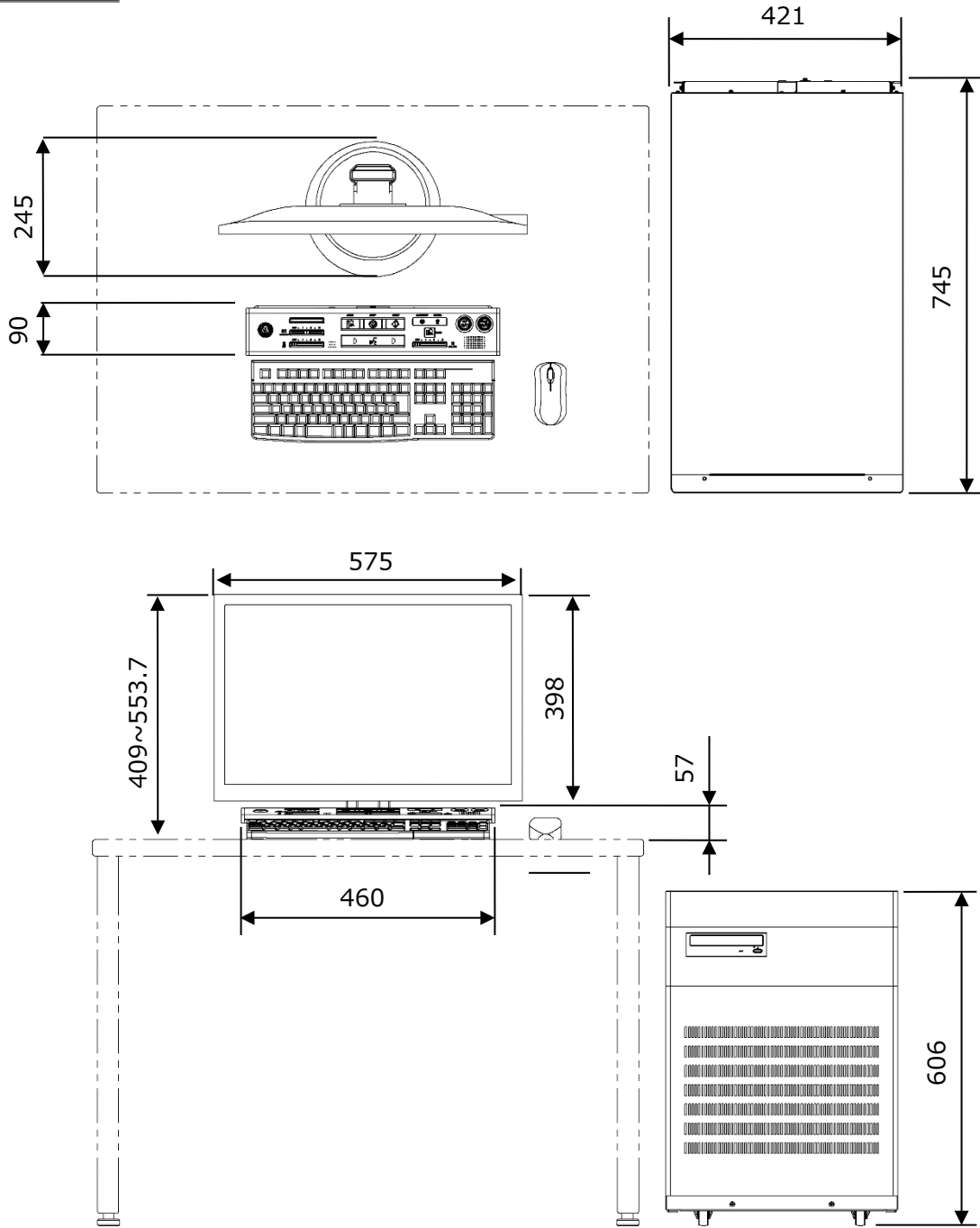
Scanner  
gantry/  
Patient  
table



\* Lateral slide patient Table (CT-WT-23) only

# SCENARIOIA View Specification

Operator's console



Dimensions of system units

Unit :mm

As for the monitor, the key-board and the mouse, a dimension and the mass may be changed because of general-purpose products.

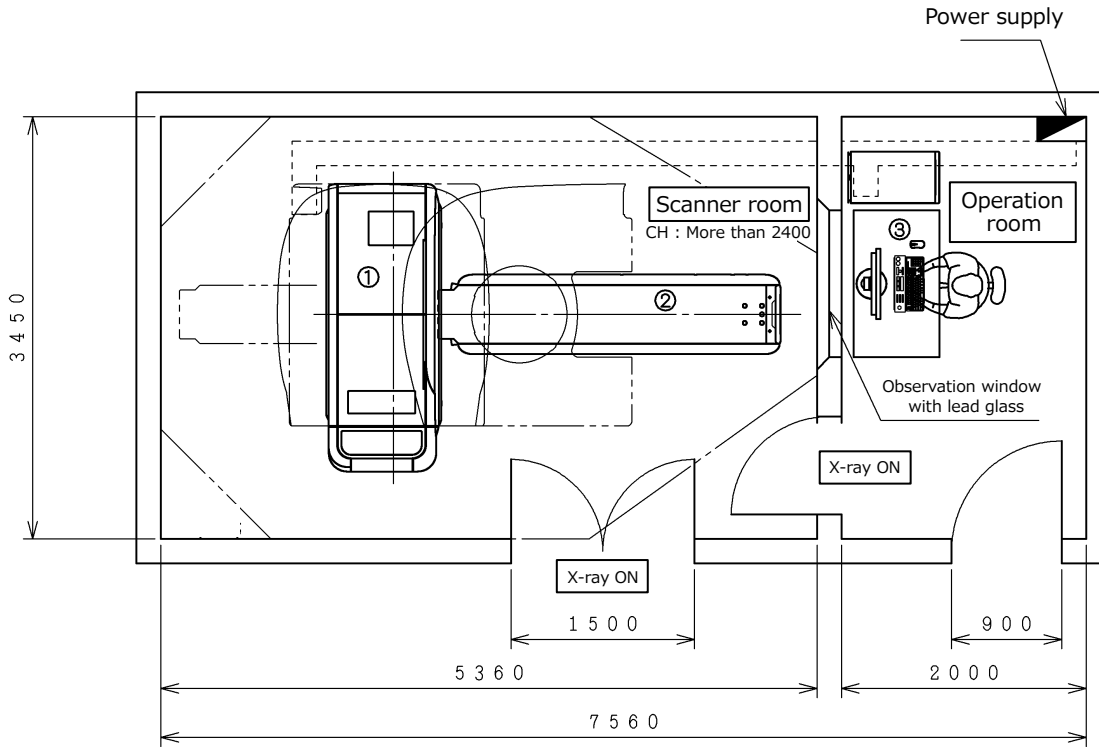
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# SCENARIA View Specification

Site planning

## 8. Site planning

Example of Installation Layout



No.	Unit	Mass (kg)
1	Scanner gantry	2,220
2	Patient table (CT-WT-22/23)	500
3	Operator's console (Main unit)	73.4

### Power requirements

3-phase 380/400V, 100kVA
Power supply load regulation : Within 5%
10Ω or less
W1,200×H600mm (Lead equivalent : 2mmPb)
Window center height : FL + 1,250mm

### Air-condition requirements

Room	Heat dissipation W (kcal/h)	Temperature range (not in use)	Humidity range
Scanner room	4,100 (3,525)	20~28°C (-5~33°C)	35~80%RH
Operation room	380 (327)	10~28°C (-5~33°C)	

## SCENARIA View Specification

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Specifications and physical appearance may be changed without prior notice.

"SCENARIA", "SCENARIA View", "IntelliEC", "Intelli IP", "CardioConductor", "CardioHarmony", "CEV", "Cruising Eye View", "HiMAR", "guideShot", "fatPointer", "riskPointer" and "Hyper Q-Net" are the registered trademarks or trademarks of FUJIFILM Healthcare Corporation in Japan and other countries.

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