



# Product Description

## Aastra BluStar Server

Aastra BluStar Server complements the BluStar Ecosystem adding a number of valuable UCC functions and services like rich presence information from different sources.

This increases the productivity of all users in conjunction with the different BluStar devices and clients.

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## 1 Introduction to BluStar Server

BluStar Server provides the BluStar endpoints and a number of other Aastra devices and clients with a number of valuable features to extend the UCC feature set of the BluStar Ecosystem.

Without any client specific configuration the BluStar server is easy to install and requires no maintenance in typical use cases.

The core elements of the BluStar Server are:

### **Presence Server:**

Connects to different presence sources and provides an aggregated presence status to all connected users.

Presence sources can be:

- Outlook/Exchange calendar
- Telephony line state
- Personal Presence set by the user via BluStar endpoint

### **CTI Server:**

Connected to Aastra's communication servers the CTI Server collects telephony line state information (idle, busy and forwarded) to publish this information to connected users via the Presence Server interface.

Using the CTI-Server BluStar for PC can be used to control a hard phone connected to the Aastra communication server to make and receive calls and handle the call using the BluStar for PC user interface.

### **Aastra Directory Server:**

This service consists of an integrated LDAP Server which is providing different options to import directory data from different databases and formats recurrently. This directory server is optimized for quick search capabilities without additional load on the original database (like AD/Exchange).

### **Lync Presence Interface:**

Connected to a Lync 2013 Server the BluStar Server offers full presence federation between Lync Clients and Aastra users connected to the BluStar Server. Microsoft Lync will give you access to presence information, but with special functionality. The service will act as a presence server also updating presence information available on the BluStar Client in the Microsoft presence server. Lync Presence states can be presented to BluStar Clients or Aastra Telephony line state and BluStar Presence status can be published to Lync users.

### **Aastra BluStar Ecosystem**

BluStar for PC is an essential part of Aastra's Unified Communication & Collaboration portfolio – the BluStar Ecosystem. BluStar takes business communications to a new level across a choice of devices, providing a consistent user experience by using video as the key mode of communication. BluStar productivity enhancing tools provide more choice and flexibility to answer the increasingly diverse communication needs of today's modern enterprise. BluStar users can communicate with audio and video across all BluStar devices connected to the same communication server or to external parties such as audio or video conference services.

## 2 Functionality

## 3 Integration with Aastra BluStar Server

### 3.1 Overview BluStar Server

The Aastra BluStar Server is providing centralized services and interfaces for the entire BluStar Ecosystem. The BluStar Server will aggregate presence information from different sources and provide them to all subscribed BluStar components and clients.

Integrated with all BluStar devices like the BluStar 8000i Desktop Media phone, BluStar for iPhone, BluStar for iPad and BluStar for Android as well as BluStar for PC, BluStar Server facilitates collaboration between mobile, remote and headquarters' employees through presence awareness.

Feature set provided by BluStar Server:

- Hard phone control (CTI) for voice calls
- Consolidated presence information
  - BluStar users' presence status (available, busy, do not disturb)
  - Interface to MX-ONE, Aastra 5000, Aastra 400 for line state
  - Outlook/Exchange calendar presence
  - Lync presence federation
- Consolidated directory
  - High performance director access via LDAP
  - Synchronization with existing directories
  - load reduction on productive directories (Active directory, exchange)
- Web Administration interface – management, configuration, administration
- VMware support

The available functionality will be determined by the capabilities in the communication servers it is connected to. Please refer to the related documentation.

### 3.2 Presence Definition

Via SIP/SIMPLE interface BluStar Server offers a presence document with rich presence information including detailed information of all connected sources. Additionally the Presence Server is aggregating the presence information from different sources to calculate one single presence status (traffic light indicator).

The BluStar Presence State is defined as:

#### **Available (green)**

- The user is signed in to the BluStar Server with any supported client or device and there is no obvious reason that this user could not be reached.

#### **Busy (orange)**

- the user does not need to be signed in. There is one or more reason why this person might not be available. This reason could be e.g. telephone line is busy, an active calendar appointment ("busy") etc.

#### **Do not Disturb (red)**

- The user has set his personal presence manually to this status to indicate that he does not want to be disturbed.

#### **Signed out (grey)**

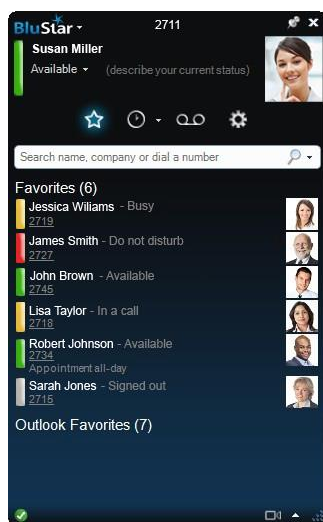
- The user is not signed in to the BluStar Server. Calendar appointments with status “Away2” will be displayed

Depending on the client capabilities the connected clients may display the aggregated presence status or additional information such as call diversion status.

### 3.2.1 Personal Presence

Using a client supported by the BluStar Server you can always define your own presence status. This manual BluStar presence always overwrites the presence states influenced by any other source. E.g. if there is a calendar appointment for a meeting and the meeting ends earlier you can manually change your presence to “Available” without any changes in your calendar.

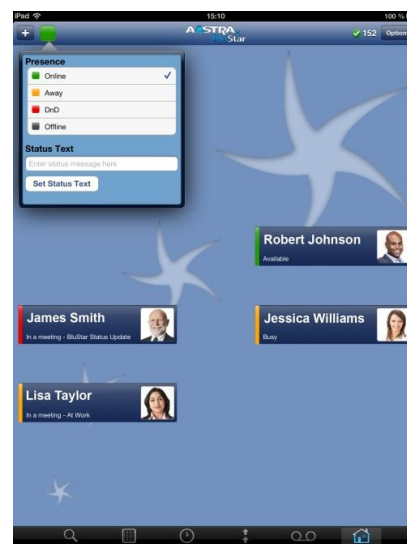
### 3.2.2 Samples of Presence Presentation



BluStar for PC



BluStar 8000i



BluStar for iPad



- free



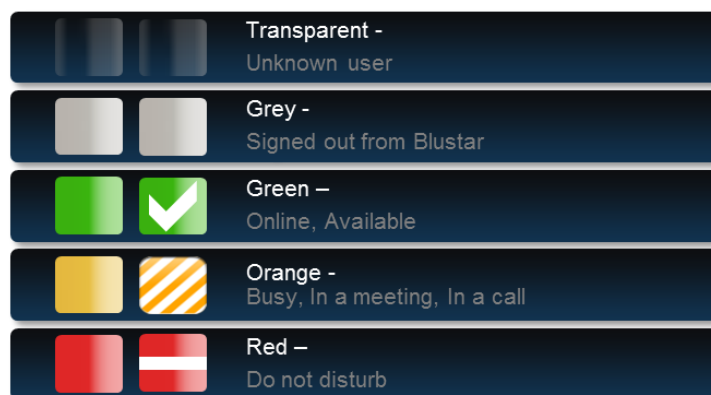
- busy



- forwarded



- no line status



## 4 System Architecture

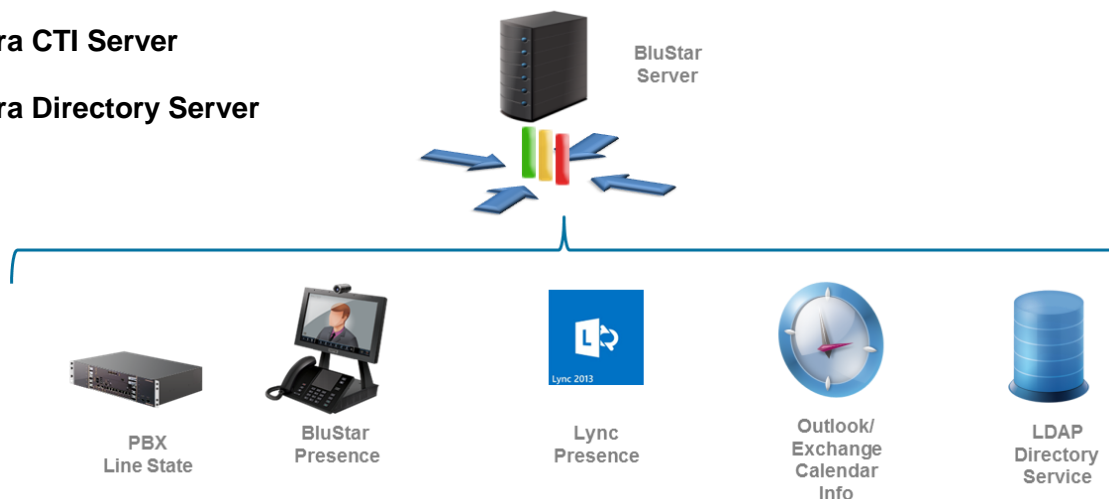
### 4.1 Overview

The BluStar Server consists of the following core elements

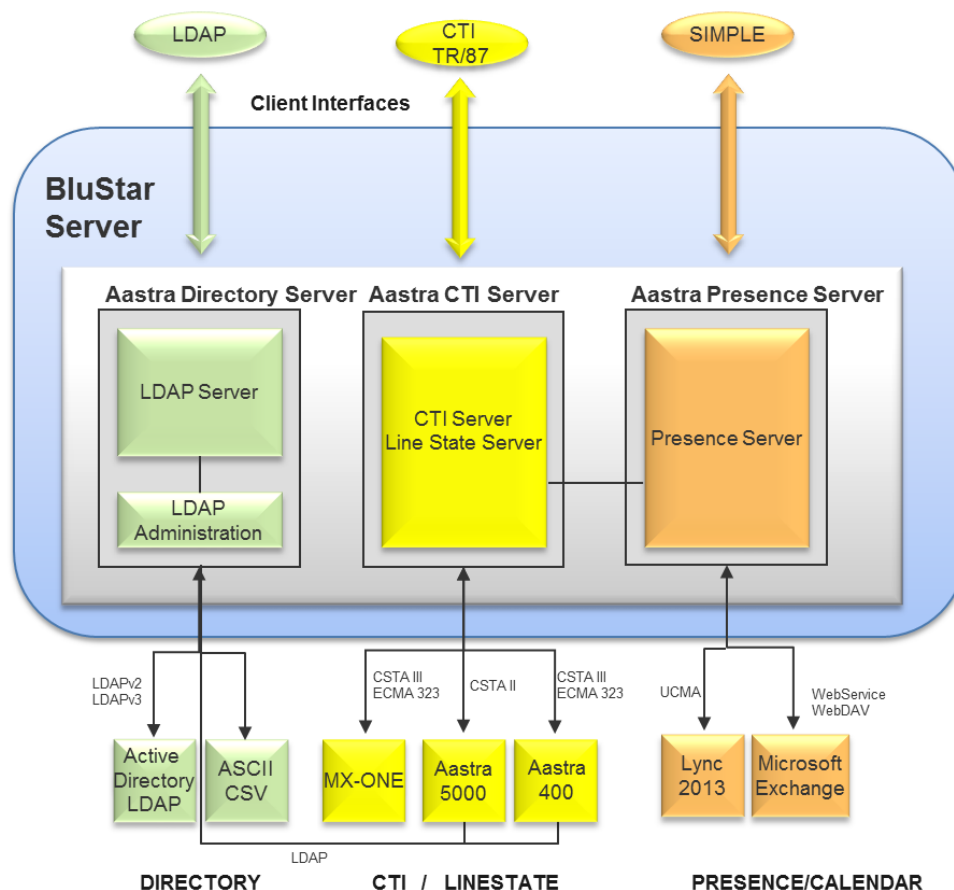
**Aastra Presence Server  
with Lync Presence Interface**

**Aastra CTI Server**

**Aastra Directory Server**



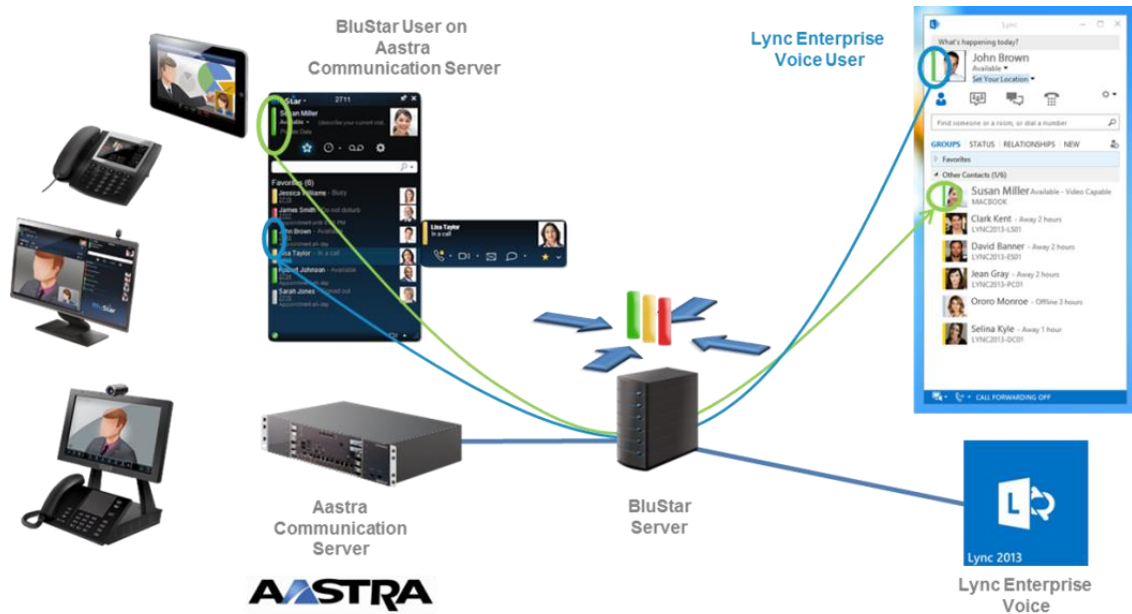
BluStar Server is connected to clients, directories and presence sources using standardized interfaces.





## 4.2 Sample Configuration with Lync Federation

In this configuration the BluStar Server federates Presence information between the two different Voice systems, one Aastra communication Server and a Lync enterprise voice system. On one hand the presence is displayed within the BluStar Clients and other Aastra devices (Aastra Attendant, Aastra Mobile Client...) on the other hand presence Information is presented within the Lync client.



### 4.3 Endpoints utilizing the BluStar Server:

Today the following devices/clients can subscribe to the BluStar Server.

- BluStar 8000i Desktop Media Phone / BluStar for Conference Room
- BluStar for PC
- BluStar for iPad, BluStar for iPhone and BluStar for Android<sup>1</sup>
- Aastra 400 Presence Synchronization
- Aastra Mobile Client (AMC)
- BluStar Web

A definition of supported features as well as the description of the integration with the BluStar Server will be provided together with the documentation of the device/client/communication server.

## 5 Configuration

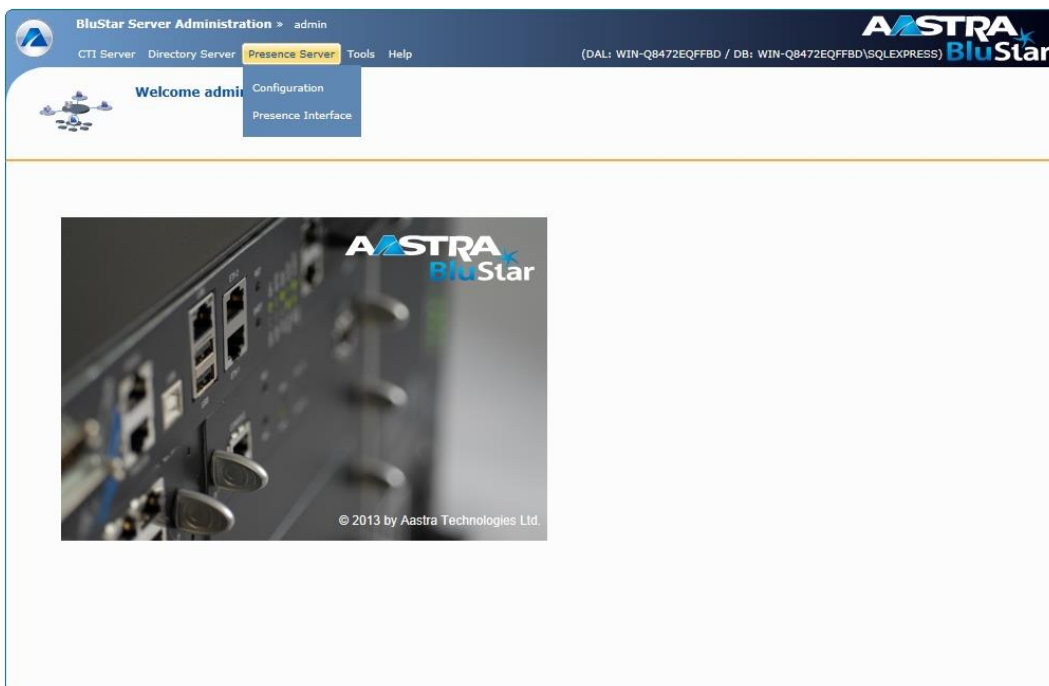
BluStar Server configuration covers all server specific interfaces. Once configured the server will run without additional maintenance efforts e.g. on moves, ads and changes to the user database of the underlying AD there is no user specific configuration required on the BluStar Server.

The system configuration of the BluStar Server is done via a web based administration tool.

Within this tool you can configure

- the Aastra Presence Server and the connected Presence Sources and Presence interface
- the Aastra CTI Server including the PBX links
- the Aastra Directory Server to define directory sources and schedule import tasks

The administration GUI also provides tools for trouble shooting as well as options to set and define privacy policies.



<sup>1</sup> Note that the BluStar Android client 1.3 does not support presence, this is planned for subsequent releases in 2014



## 6 Licensing

BluStar Server itself is not licensed separately. The BluStar Server license will be included in any Aastra BluStar Client delivery with presence requirements. Client licenses are handled in the communication server.

There is a separate system license available for server based Lync integration interface in two steps:  
Medium (up to 500 presence user)  
Large (>500 presence Users)

## 7 Documentation

The BluStar Server Admin Guide is part of the installation package and is also available on <https://infochannel.aastra.com/>.

## 8 Supported Languages

Aastra BluStar Server and the related technical documents are available in English.

## 9 System Requirements

For the latest information regarding requirements and compatibility information, please refer to the latest release notes published on Aastra InfoChannel: <https://infochannel.aastra.com/>.

### 9.1 *Supported Aastra Communication servers*

- Aastra 400 R3.1
- Aastra 5000 R5.4 SP3
- MX-ONE 5.0 SP5

The available functionality in BluStar will be determined by the capabilities in the Communication Servers it is connected to.

### 9.2 *HW requirements for the BluStar Server*

- CPU: 2,2 GHz or faster,
- 2 cores recommended
- RAM: 8 GB
- Hard drive: 10 GB available space
- Network: GigE network adapter

### 9.3 *Virtual Environments*

For VMware vSphere 5.1 based virtualized environments the HW requirement do not differ for the virtual machine; the actual performance will depend on the overall load of the machine hosting the Virtual Machines.

## **9.4 *Operating system and software requirements for the BluStar Server***

- Microsoft Server 2008 R2 SP1 ENG
- Microsoft Server 2012 SP1 ENG

### **9.4.1 System Integration**

#### **Calendar systems**

- MS Exchange 2007, 2010, 2013
- MS Exchange Online

#### **Directory Sources:**

- LDAP, SOAP, ASCII files

#### **Lync Integration**

- Lync 2013 (version 15.0.4454 and higher)

## 10 Acronyms

AD	Active Directory
AEC	Automatic Echo Canceling
AGC	Automatic Gain Control
BAS	BluStar Application Server
CMG	Collaboration Management Suite
DNS	Domain Name System
DTMF	Dual Tone Multiple-Frequency
HD	High Definition
LAN	Local Area Network
LDAP	Lightweight Directory Access Protocol
PSTN	Public Switched Telephone Network
RFB	Remote Frame buffer Protocol
RFC	Request For Comments
RTP	Real-time Transport Protocol
SBC	Session Border Controller
SDP	Session Description Protocol
SDK	Software Development Kit
SIP	Session Initiation Protocol
SP	Service Pack
UCC	Unified Communication and Collaboration
XML	eXtensible Markup Language

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