# Business Message Standard (BMS)


## for


## Plan / Bulk Data For Forecast

## BRG: Plan


## Version: 2.0.3


## Date: <u>31/03/2005</u>

## Change Request Reference

| | |
|---|---|
| **Refer to Change Request (CR) Number(s):** | |
| **CR Submitter(s):** | |
| **Date of CR Submission to GSMP:** | |

## Business Requirements Document (BRAD) Reference

| |
|---|
| **BRAD Title:** Bulk Data For Forecast – Business Requirement Document |
| **BRAD Date:** 30/06/2003 |
| **BRAD Version:** 0.2.3 |

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|---|
| **BRAD Title:** |
| **BRAD Date:** |
| **BRAD Version:** |

## Document Summary

| | |
|---|---|
| **Document Title:** | BMS For Plan/Bulk Data For Forecast |
| **Document Version** | 2.0.3 |
| **Owner:** | Plan BRG |
| **Status:** | (*Check one box*) ☐ DRAFT ▪ Approved |
| **BMS Template Version:** | 1.0 |
| **Targeted BMS Publication Version** | 2.0.2 |

## Document Change History

| Date of Change | Version | Changed By | Reason for Change | Summary of Change | Model Build # |
|---|---|---|---|---|---|
| 31/03/2005 | 2.0.1 | Alice Aguemon | Initial Version in BMS/BSD template | Migration of BRD to standard BMS/BSD format | N/A |
| 31/03/2005 | 2.0.2 | Andrew Hearn | Context Update | Updated the context listed within the document | N/A |
| 23/04/2007 | 2.0.3 | Giovanni Biffi | Editorial Changes | Minor Editorial Changes to the Document | N/A |

# 1 Business Solution Design

## 1.1    Business Domain View
## 1.1.1    Problem Statement / Business Need

Collaborative Planning Forecasting and Replenishment (CPFR®) is a well documented nine step process developed and maintained by the Voluntary Interindustry Commerce Standards Association (VICS) for use by trading partners.

In the CPFR® process Bulk Data for Forecast is a message format.

The Bulk Data for Forecast Business Requirements Document is the output of the VICS CPFR®, GCI, the Plan BRG (Business Requirements Group) and EAN ECEG (Electronic Commerce Expert Group). It is the responsibility of the BRG's to provide the business requirements for the process of the creation and maintenance of the business and data models. The BRG's develop and maintain business process models and supporting use case diagrams, logic diagrams and data requirements for a specific business function in a global electronic commerce environment. The BRG's review and resolve change requests. The BRG's provide guidance for the technical application of new business processes and changes to existing business processes. Currently, BRG's exist for the following business processes: Align Data, Plan, Order, Despatch, Pay, After Sales Services, Asset Management, Manufacturing and Point Of Service.  EAN (ECEG) covers similar functionality, through a pool of experts that liaises with the local users, ensuring the effective gathering of the business requirements from its network of national Member Organisations world-wide.

Each bulk data message is a uniform series of records of a single message type. Records criteria include width, order of fields and default values.

A bulk data description may be provided with every batch file, or a single description may be used to describe all files of that type exchanged between a buyer and a seller.

**CPFR® is the registered trademark of VICS, the Voluntary Interindustry Commerce Standards Association**

## 1.1.2    Objective

The purpose of this Business Requirements Document is to document a process-to-data approach. The Unified Modelling Language (UML) is used for notation. Processes are clearly understood because of the use of formal modelling with the UML models. Agreed to models permit the application of the data elements to support the processes. The biggest benefit of this process-to-data approach is the alignment of the model to fit the business need.

## 1.1.3    Audience

The audience for this document is anyone involved in collaborative planning, forecasting and replenishment

To better understand this business requirements document the audience should become familiar with the VICS CPFR® Process, the VICS CPFR® XML Messaging Model, June 13, 2001 and VICS Collaborative Planning Forecasting and Replenishment (CPFR®), Global Commerce Initiative Recommendation, June 30, 2001 as these documents provide the basis and context of the business requirements.

## 1.1.4    Artefacts

| Artefact name | State | Artefact / State description |
|---|---|---|
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

### 1.1.5  References

| Reference Name | Description |
|---|---|
| EAN•UCC Global Business Model (Process and Data), "The Trade Of Goods and Services", October 1999 |  |
| VICS CPFR® XML Messaging Model, June 13, 2001 |  |
| VICS Collaborative Planning Forecasting and Re-plenishment (CPFR®), Global Commerce Initiative Recommendation, June 30, 2001 |  |

### 1.1.6 Acknowledgements

#### 1.1.6.1 BRG Members

| Function | Name | Company |
|---|---|---|
| Plan BRG Co-Chair | Not filled in the previous BRD | |
| Plan BRG Member | Not filled in the previous BRD | |
| Plan BRG Member | | |
| Plan BRG Member | | |
| Plan BRG Member | | |
| Plan BRG Manager | | |

#### 1.1.6.2 ITRG Members

| Function | Name | Company / organisation |
|---|---|---|
| ITRG Chair | None | |
| ITRG Member | None | |
| ITRG Member | None | |
| ITRG Member | None | |
| ... | | |

#### 1.1.6.3 Task/Project Group Participants (*where applicable*)

| Function | Name | Company / organisation |
|---|---|---|
| Participant | None | |
| Participant | None | |
| Participant | None | |
| ... | | |

#### 1.1.6.4 Design Team Members

| Function | Name | Organisation |
|---|---|---|
| Modeller | | |
| XML Technical Designer | | |
| EANCOM Technical Designer | | |
| Peer Reviewer | | |
| | | |

## 1.2  Business Context

| Context Category | Value(s) |
|---|---|
| Industry | All |
| Geopolitical | All |
| Product | All |
| Process | Plan |
| System Capabilities | EAN.UCC |
| Official Constraints | None |

## 1.3  Additional Technical Requirements Analysis
### 1.3.1  Technical Requirements (optional)

*(User Interface, Security, Performance, Quality, etc.))*

| Number | Statement | Rationale |
|---|---|---|
| | | |

## 1.4    Business Transaction View

### 1.4.1    Business Transaction Use Case Diagram

| Use Case ID | UC-1 |
|---|---|
| **Use Case Name** | Request Bulk Data For Forecast |
| **Use Case Description** | **Not filled in the previous BRD** |
| **Actors (Goal)** | Bulk data for forecast is a two-actor system involving a buyer and a seller. |
| **Performance Goals** | *Goals related to technical requirements*<br><br>**None** |
| **Preconditions** | Both trading partners engage in CPFR® Step 1. |
| **Post conditions** | Success : The bulk data for forecast is sent and received.<br><br>Failure : The bulk data for forecast can be neither sent nor received. |
| **Scenario** | **Begins when** the step 1 of the  CPFR® process is started.<br><br>**Continues with**...<br><br><div align="center">**Step #**<br>**Actor**<br>**Activity Step**</div><br>*1*<br>Both trading partners have started CPFR® Step 1<br><br>*2*<br>Both trading partners agree on the fixed record width<br>*3*<br>Both trading partners agree on default values<br>*4*<br>Both trading partners agree on description rules<br><br>*5*<br>Both trading partners create, send and receive a trial message<br>*6*<br>Both trading partners exchange bulk forecast data Both trading partners have established the buyer and seller exception criteria<br><br><br>**Ends when**... the bulk data is exchanged. |

| | |
|---|---|
| **Alternative Scenario** | There are no alternative scenarios.<br><br>**None**<br><br>               **Step #**<br>               **Actor**<br>               **Activity Step** |
| **Related Requirements** | **None** |
| **Related Rules** | *Business rules associated with use case.*<br><br>**None** |

### 1.4.2   Business Transaction Activity Diagram(s)

**Not filled in the previous BRD**

### 1.4.3 Business Transaction Sequence Diagram(s) (optional)

**Not filled in the previous BRD**

## 1.5 Information Model (including GDD Report)

### 1.5.1 Data Description:

| Class (ABIE) | Attribute (BBIE) | Association (ASBIE) | Secondary Class | Related Requirements |
|---|---|---|---|---|
| BulkData | | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | fileExtension | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | fileName | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | | None | PlanDocument | BRD for Bulk Data For Forecast V 0.2.3 |
| BulkRecord | | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | companyIdentificationFormat | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | dateDelimiter | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | dateFormat | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | isTrimDate | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | locationIdentificationFormat | | | BRD for Bulk Data For Forecast V 0.2.3 |
| ForecastBulkData | | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | | None | BulkData | BRD for Bulk Data For Forecast V 0.2.3 |
| | | recordDescriptor | ForecastBulkRecord | BRD for Bulk Data For Forecast V 0.2.3 |
| ForecastBulkRecord | | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | | None | BulkRecord | BRD for Bulk Data For Forecast V 0.2.3 |
| | | default | ForecastDefaultField | BRD for Bulk Data For Forecast V 0.2.3 |
| | | None | ForecastDelimitedRecord | BRD for Bulk Data For Forecast V 0.2.3 |
| | | None | ForecastFixedWidthRecord | BRD for Bulk Data For Forecast V 0.2.3 |
| ForecastDefaultField | | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | forecastDefaultFieldValue | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | | None | ForecastField | BRD for Bulk Data For Forecast V 0.2.3 |
| ForecastDelimitedField | | | | BRD for Bulk Data For Forecast V 0.2.3 |

| Class (ABIE) | Attribute (BBIE) | Association (ASBIE) | Secondary Class | Related Requirements |
|---|---|---|---|---|
| | | None | ForecastField | BRD for Bulk Data For Forecast V 0.2.3 |
| ForecastDelimitedRecord | | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | areStringFieldsQuoteDelimited | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | delimiter | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | | field | ForecastDelimitedField | BRD for Bulk Data For Forecast V 0.2.3 |
| ForecastField | | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | forecastFieldType | | | BRD for Bulk Data For Forecast V 0.2.3 |
| ForecastFixedWidthField | | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | beginColumnNumber | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | endColumnNumber | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | | None | ForecastField | BRD for Bulk Data For Forecast V 0.2.3 |
| ForecastFixedWidthRe-cord | | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | numberOfColumns | | | BRD for Bulk Data For Forecast V 0.2.3 |
| | | field | ForecastFixedWidthField | BRD for Bulk Data For Forecast V 0.2.3 |

## 1.5.2   GDD Report :

| Class (ABIE) | Attribute (BBIE) | Association (ASBIE) | Secondary Class | Official Dictionary Entry Name | Definition | Multiplicity |
|---|---|---|---|---|---|---|
| BulkData | | | | Bulk Data. Details | !! This external class originates in Bulk Common and is a class that is used in more than one CPFR® class diagram. This is a type of plan document and links data to a bulk record. | |
| | fileExtension | | | Bulk Data. File Extension. Text | | 0..1 |
| | fileName | | | Bulk Data. File Name. Text | | 0..1 |
| | | None | PlanDocument | Bulk Data. Inheritance_ Association. Plan Document | None | 1..1 |
| BulkRecord | | | | Bulk Data Line. Details | !! This external class originated in Bulk Common and is a class that is used in more than one CPFR® bulk class diagram. The bulk record links | |

| Class (ABIE) | Attribute (BBIE) | Association (ASBIE) | Secondary Class | Official Dictionary Entry Name | Definition | Multiplicity |
|---|---|---|---|---|---|---|
| | | | | | company ID format(s), location ID format(s) and date format(s). | |
| | companyIdentificationFormat | | | Bulk Data Line. Company Identification Format. Company Identification Format_ Code | Not Available | 0..1 |
| | dateDelimiter | | | Bulk Data Line. Date Delimiter. a1_ Text | Not available | 0..1 |
| | dateFormat | | | Bulk Data Line. Date Format. Date Format_ Code | Not Available | 0..1 |
| | isTrimDate | | | Bulk Data Line. Is Trim Date. Indicator | Not Available | 1..1 |
| | locationIdentificationFormat | | | Bulk Data Line. Location Identification Format. Location Identification Format_ Code | Not Available | 0..1 |
| ForecastBulkData | | | | Forecast_ Bulk Data. Details | !! This is the root class for bulk data for forecast and links a forecast bulk record to bulk data. | |
| | | None | BulkData | Forecast_ Bulk Data. Inheritance_ Association. Bulk | None | 1..1 |

| Class (ABIE) | Attribute (BBIE) | Association (ASBIE) | Secondary Class | Official Dictionary Entry Name | Definition | Multiplicity |
|---|---|---|---|---|---|---|
| | | | | Data | | |
| | | recordDescriptor | ForecastBulkRecord | Forecast_ Bulk Data. Record Descriptor. Forecast_ Bulk Data Line | !! This class provides the record descriptor for the forecast bulk data and identifies the default fields, and the table as fixed field width or delimited field. | 1..1 |
| ForecastBulkRecord | | | | Forecast_ Bulk Data Line. Details | This class provides the record descriptor for the forecast bulk data and identifies the default fields, and the table as fixed field width or delimited field. | |
| | | None | BulkRecord | Forecast_ Bulk Data Line. Inheritance_ Association. Bulk Data Line | None | 1..1 |
| | | default | ForecastDefaultField | Forecast_ Bulk Data Line. Default. Forecast_Default_ Bulk Data Field | !! Forecast bulk records may have an assigned default or defaults. The forecast default field provides the | 0..* |

| Class (ABIE) | Attribute (BBIE) | Association (ASBIE) | Secondary Class | Official Dictionary Entry Name | Definition | Multiplicity |
|---|---|---|---|---|---|---|
| | | | | | default and has one attribute: Value | |
| | | None | ForecastDelimitedRecord | Forecast_ Bulk Data Line. Choice_ Association. Forecast_Delimited_ Bulk Data Line | None | 1..1 |
| | | None | ForecastFixedWidthRecord | Forecast_ Bulk Data Line. Choice_ Association. Forecast_Fixed Width_ Bulk Data Line | Not Available | 1..1 |
| ForecastDefaultField | | | | Forecast_Default_ Bulk Data Field. Details | Forecast bulk records may have an assigned default or defaults. The forecast default field provides the default and has one attribute: • Value The default value to be used for the field when that field is not present in the file. | |
| | forecastDefaultFieldValue | | | Forecast_Default_ Bulk Data Field. Value. Text | | 1..1 |
| | | None | ForecastField | Forecast_Default_ | None | 1..1 |

| Class (ABIE) | Attribute (BBIE) | Association (ASBIE) | Secondary Class | Official Dictionary Entry Name | Definition | Multiplicity |
|---|---|---|---|---|---|---|
| | | | | Bulk Data Field. Inheritance_ Association. Forecast_ Bulk Data Field | | |
| ForecastDelimitedField | | | | Forecast_Delimited_ Bulk Data Field. Details | Each forecast delimited record has one or more delimited fields. This class has no attributes. | |
| | | None | ForecastField | Forecast_Delimited_ Bulk Data Field. Inheritance_ Association. Forecast_ Bulk Data Field | None | 1..1 |
| ForecastDelimitedRecord | | | | Forecast_Delimited_ Bulk Data Line. Details | A forecast bulk record may be established as a forecast delimited record. This class provides the basis for the record. The forecast delimited record has two attributes: Delimiter Are string fields quote delimited | |
| | areStringFieldsQuoteDelimited | | | Forecast_Delimited_ Bulk Data Line. Are String Fields Quote | Indicator of whether string fields within the | 1..1 |

| Class (ABIE) | Attribute (BBIE) | Association (ASBIE) | Secondary Class | Official Dictionary Entry Name | Definition | Multiplicity |
|---|---|---|---|---|---|---|
| | | | | Delimited. Indicator | record are delimited by quotation marks. | |
| | delimiter | | | Forecast_Delimited_ Bulk Data Line. Delimiter. a1_ Text | Single character to be used as a field delimiter (e.g., comma, tab, or asterisk). | 1..1 |
| | | field | ForecastDelimitedField | Forecast_Delimited_ Bulk Data Line. Forecast Delimited_ Field. Fore-cast_Delimited_ Bulk Data Field | !! Each forecast delimited record has one or more delimited fields. This class has no attributes. | 1..* |
| ForecastField | | | | Forecast_ Bulk Data Field. Details | The forecast field class provides for the assignment of a field type code to the fields of a record. The forecast field class has no attributes. | |
| | forecastFieldType | | | Forecast_ Bulk Data Field. Type. Fore-cast Field Type_ Code | !! Each field will have an assigned forecast field type from the forecast field type code list. Forecast field type code list has the following | 1..1 |

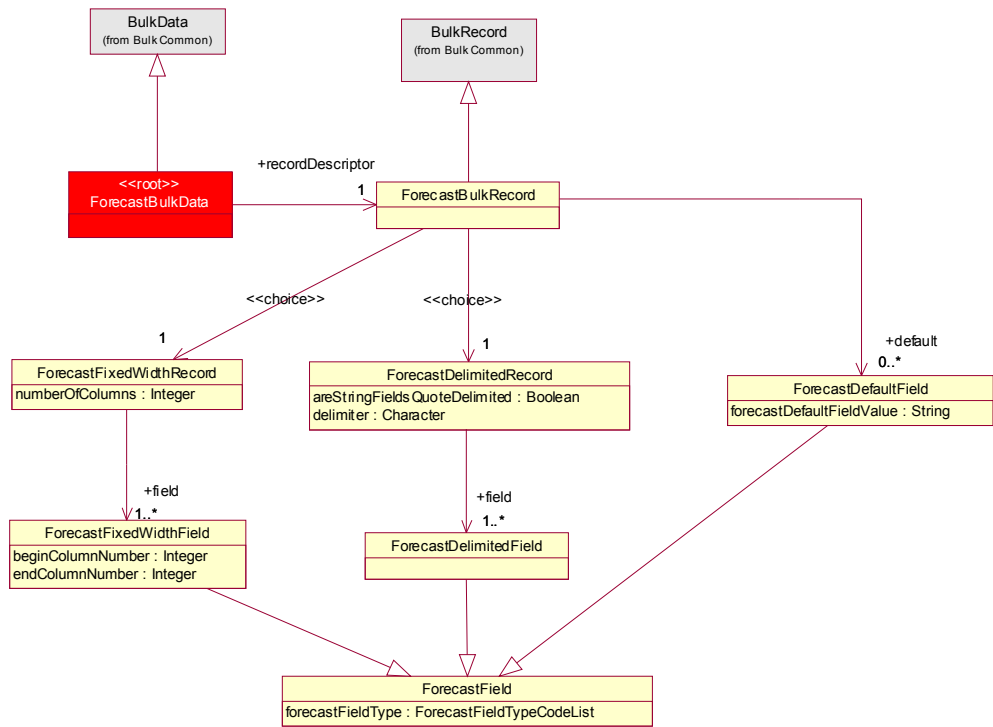| Class (ABIE) | Attribute (BBIE) | Association (ASBIE) | Secondary Class | Official Dictionary Entry Name | Definition | Multiplicity |
|---|---|---|---|---|---|---|
| | | | | | attributes: Fore-cast purpose code, Forecast status code, Forecast type code | |
| ForecastFixedWidthField | | | | Forecast_Fixed Width_ Bulk Data Field. Details | Each forecast fixed width re-cord may have one or more fields. This class links the fields to the record. The forecast fixed width field has two attributes: Begin column number End column number | |
| | beginColumnNumber | | | Forecast_Fixed Width_ Bulk Data Field. Begin_ Col-umn Number. Text | The beginning column number of the field. (The first column is column 1) | 1..1 |
| | endColumnNumber | | | Forecast_Fixed Width_ Bulk Data Field. End_ Column Number. Text | The ending col-umn number of the field. | 1..1 |
| | | None | ForecastField | Forecast_Fixed Width_ Bulk Data Field. Inheritance_ Association. Fore- | None | 1..1 |

| Class (ABIE) | Attribute (BBIE) | Association (ASBIE) | Secondary Class | Official Dictionary Entry Name | Definition | Multiplicity |
|---|---|---|---|---|---|---|
| | | | | cast_ Bulk Data Field | | |
| ForecastFixedWidthRecord | | | | Forecast_Fixed Width_ Bulk Data Line. Details | Each forecast bulk record may be either a fixed width record or a delimited record. This class links fixed fields to the record. This class has one attribute to identify the number of columns. • Number of columns | |
| | numberOfColumns | | | Forecast_Fixed Width_ Bulk Data Line. Column Quantity. Quantity | A count of the number of fields expected in Batch messages of this type. | 1..1 |
| | | field | ForecastFixedWidthField | Forecast_Fixed Width_ Bulk Data Line. Forecast Fixed With_ Field. Forecast_Fixed Width_ Bulk Data Field | !! Each forecast fixed width record may have one or more fields. This class links the fields to the record. The forecast fixed width field has two attributes: Begin column number, End column number. | 1..* |

### 1.5.3   Class Diagrams

### 1.5.4   Code Lists

| Code List Name | Code List Description |
|---|---|
| ForecastFieldTypeCodeList | |
| **Code Name** | **Code Description** |
| FORECAST_PURPOSE_CODE | N/A |
| FORECAST_STATUS_CODE | N/A |
| FORECAST_TYPE_CODE | N/A |

*BMS* Version: 2.0.3                    Page:

## 1.6 Business Document Example
Not filled in the previous BRD

## 1.7    Implementation Considerations

Not filled in the previous BRD

## 1.8    Testing
### 1.8.1    Pass / Fail Criteria

*Unit testing criteria for business solution.*

| Nu mb er | Test Criteria | Related Re- quirement | Design Element | Pass Criteria | Fail Criteria |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |

### 1.8.2    Test Data

Test data is detailed in section 1.7.

## 1.9  Appendices

## 1.10  Summary of Changes

*(Details changes to BMS for each version by BMS Section)*

| Change | BMS Version | Associated CR Number |
|---|---|---|
|  |  |  |
|  |  |  |
|  |  |  |

## 2. XML Technical Solution ITRG Packet

The Technical Representation of the Business process is documented in a Technical So-lution ITRG Packet containing all supplemental XML artefacts and is used by the Informa-tion Requirements Group (ITRG) to evaluate the solution. Upon approval from the Infor-mation Technical Requirements Group (ITRG), the Technical Solution ITRG Packet is updated to the Technical Solution Implementers Packet and published with the Business

Message Standard at:
http://www.ean-ucc.org/global_smp/ean.ucc_standards.htm.

Technical Solution ITRG Packet Content:
- Business Message Standard  (BMS)
- ITRG Review Packet
  - Style Sheet: This HTML has been created using a Style Sheet that is a visual representation of the data.  It is not an actual Style Sheet, but an ex-ample of what a Style Sheet may look like.
  - Instance File: The Instance File is an example of what the schema may look like when it includes live data.  This can be used as comparison to a completed schema and can serve as a point of reference for devel-opment.
  - Technical Level GDD Report

Technical Solution Implementers Packet Content:
Contains all the message specific.XSD files required to implement
Example:
- AS2Envelope
- Command.xsd
- DocumentCommand.xsd
- Proxy.xsd
- ComponentLibrary.xsd

Both the Business Message Standard and the Implementers Packet are available during the ITRG Review Period in the working documents section of the ITRG eRoom:

http://eroom.uc-council.org/eRoom/facility/InformationTechnicalAssessmentGroupITAG/0_14f7

All documents for review will be in this folder listed by name of the Change Request and Change Request Number. The Business Message Standard is not open for review, but offered as the basis for determining the suitability of the technical solutions.

This eRoom may be accessed by using the following User Name and Password:

User Name:  guest
Password:     guest