

Asp Database Requirements

Hotel Property ToolBox Release 2

Confidential and Proprietary Document

Subject: Customer Site Operational Database Needs

Author(s): Brian Duke

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Introduction

The purpose of this document is to outline the additional data/information requirements necessary for version 2 of the toolbox.

The requirements covered in this document are largely independent of the data requirements of the PMS system.

Detailed Operational Information

The following sections attempt to define our informational storage needs down to the field level. No attempt has been made to normalize the data. All fields will need to be archived to allow for change history reports.

User ID/Contact Information

A table of valid users must be maintained to restrict access and track changes. It will also be useful to have basic contact information for the user. This may already exist in the PMS database and we should take advantage of that if possible.

user_id table:

Field Name	Data Type	Data Length	Required	Description
user_key	key		Y	
user_id	string	20	Y	user id
password	string	20	Y	user password
phone	string	20	N	phone number
cell_phone	string	20	N	cell phone number
company	string	50	N	user's employer

Logging

The toolbox, when requested, will gather the current logs on the toolbox and send them up to the asp. This data will then be presented to the user and archived in the database as blobs.

tb_log table:

Field Name	Data Type	Data Length	Required	Description
log_id	key		Y	
org_id	FK		Y	foreign key to organization table
log_type	number		Y	log type (from LOG_TYPE in CG_REF_CODES)
log_data	blob		Y	the compressed log file

Property Specific Information

The Implementation Team will enter all property-specific information into our operational database via several Internet-accessible, password protected web forms.

Some of this information will also be used to create the propertyconfigs RPM unique to that property.

IP Addresses will be unique to a property. The ToolBox, Protocol Box, and any network printers will have static IP addresses. All workstations will use DHCP for address assignment. IP addresses will be assigned as follows:

AAA.BBB.CCC.DD1	eth1 interface on the ToolBox
AAA.BBB.CCC.DD2	ppp0 interface on the ToolBox
AAA.BBB.CCC.DD3	Reserved
AAA.BBB.CCC.DD4	Reserved
AAA.BBB.CCC.DD5	Protocol Box 1
AAA.BBB.CCC.DD6	Protocol Box 2
AAA.BBB.CCC.DD7	Reserved
AAA.BBB.CCC.DD8	Reserved
AAA.BBB.CCC.DD9	Reserved
AAA.BBB.CCC.D10	Network Printer 1
AAA.BBB.CCC.D11+	Assigned to workstations by ToolBox DHCP server

Customer Support, Implementation, Network Services, and Sales teams will access much of this property-specific information. Each might modify various data fields. For all data fields, we need the ability to archive the data as it changes.

With the introduction of hotel device interfaces to the next generation toolbox, configuration parameters can vary greatly from one toolbox to another. In addition, new properties will constantly be created as new interfaces are written.

For this reason, a dynamic type of table needs to be created which allows new properties to be created as rows rather than tables.

site_config table:

Field Name	Data Type	Data Length	Required	Description
org_id (key)	FK		Y	foreign key to organization table
param_name (key)	string	200	Y	config parameter name
param_value	string	200	Y	config parameter value
device_id	FK		Y	foreign key to device_list table

The parameter description table describes what the parameter is and any constraints to place on it. This is used by the gui to limit/mask what the user may enter

param_desc table:

Field Name	Data Type	Data Length	Required	Description
device_id (key)	FK		Y	foreign key to device_list table
param_name (key)	string	200	Y	param name
param_desc	string	500	Y	param description
param_type	string	10	Y	param type (from PARAM_TYPE in CG_REF_CODES)
default_value	string	200	Y	default value for param
value_mask	string	50	N	mask (ex dd/mm/yyyy)
value_min	number		N	minimum value allowed
value_max	number		N	maximum value allowed

The device table is used to group parameters according to device. If a parameter in the site config table has a valid device_id parameter, then it describes a parameter of the device and also lists a default value. This will allow the gui to display a list of devices to configure. When a device is selected, a simple sql command will get the list of properties and default values that go with the device (ex. "select * from site_config where device_id = device.device_id".)

device_list table:

Field Name	Data Type	Data Length	Description
device_id	number		key
device_name	string	200	name of device (ex. ActiveVoice Reparte voicemail)
description	string	500	optional description

The device class table contains all the java class files that implement our GSS interfaces.

device_class

Field Name	Data Type	Data Length	Description
device_class_id	number		key
device_list_id	FK		foreign key to device_list table
package_name	string	200	reserved for future use
class_name	string	200	name of class
entry_point	boolean		class is entry point and exports HTDevice interface
class_data	blob		the class file

Toolbox Status

I need a table to keep up with the current status of a toolbox. Rows in this table could be things such as (20112, Power, Yes) indicating that site 20112 has Power. Different sites may have different status' pertaining to devices so I don't want to create a table with every possible status or we could have a lot of columns. org_id and status_key should be primary keys so dups aren't allowed.

tb_status:

Field Name	Data Type	Data Length	Description
org_id	FK		foreign key to org table
status_key	string	30	name of a status key (ex. Power, Connection)
value	string	30	value of key (ex. Yes, Disconnected)

CG_REF_CODES

This existing table in the tbox2 schema needs the following additional rows to support type fields in the above new tables.

RV_DOMAIN	LOW_VALUE	HIGH_VALUE	ABBREVIATION	DESCRIPTION
LOG_TYPE	0		SYSL	Syslogs
LOG_TYPE	1		TRIP	Tripwire
LOG_TYPE	2		INTF	Interface
LOG_TYPE	3		NETL	Network
PARAM_TYPE	0		STRN	String
PARAM_TYPE	1		NUMB	Number
PARAM_TYPE	2		DATE	Date
PARAM_TYPE	3		LIST	List