

R:Documenter 11



Help Manual



R:Documenter 11

Manual

by R:BASE Technologies, Inc.

Welcome to R:Documenter 11!

R:Documenter is an R:BASE Plugin used for creating detailed documentation for R:BASE databases.

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Part



1 Introduction

1.1 Introducing R:Documenter 11

R:Documenter is an R:BASE Plugin used for creating documentation for R:BASE databases.

R:Documenter supports options to create documentation output for database system tables, tables, views, ODBC server tables, attached dBase tables, stored procedures, forms, reports, labels, primary keys, foreign keys, unique keys, indexes and triggers.

R:Documenter will create a separate report for each portion of the database, with 14 different output options.

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First Edition

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RBTI warrants to you, as the initial user, the Program will perform substantially in accordance with the Documentation, provided it is used in unaltered form with functioning equipment and operating systems for which it was designed. RBTI will, at its option, with proof of payment within 30 days of the invoice date and after the Program with Documentation has been deactivated and uninstalled, and software installer, whether provided by download or other means, permanently deleted from all drives and folders, issue a full refund. These are your sole remedies for any breach of warranty. No exceptions will be made.

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- To help us expedite the process and provide high quality assistance, the licensee must provide proof of purchase when calling. Proof of purchase is defined as the following: registration number, purchase date, version and build number, and company or individual to which product is registered.
- To have operating system, workstations, and local network installed and functional. RBTI will NOT be responsible for resolving issues not pertaining to the Program.
- Our support staff deals with advanced issues, therefore the person contacting RBTI for assistance should be the system administrator or have other R:BASE/SQL experience and be able to understand and implement the advice given.
- To have the database(s) being converted, safely backed-up before attempting conversion process. RBTI will NOT be held responsible for lost data or corruption as a result of advice given.

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- To provide quality assistance in a timely manner to aid Licensee in the installation of the product within 30 days of the date of purchase.
- To provide a reasonable solution for any resolvable issue. Not all issues are resolvable, and therefore we will acknowledge the existence of known issues or "bugs" which we are presently aware of, that have no reasonable work-around.

RBTI reserves the right to limit the amount of support time allotted to a maximum of 2 HOURS during the 30-Day Complimentary Technical Support Period. We also reserve the right to limit the quantity of calls from a particular Licensee to 30 MINUTES in a single day. Issues are dealt with on a case-by-case basis, and are handled at the discretion of the support agent assigned to the case. Complimentary Support is limited to **INSTALLATION** and **ELEMENTARY CONVERSION** related issues **ONLY**. Our support hours are from 10am. to 6pm. Eastern Time.

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1.4 Complimentary Support

30 DAY LIMITED COMPLIMENTARY TECHNICAL SUPPORT

A. LICENSEE RESPONSIBILITIES.

1. To help us expedite the process and provide high quality assistance, the licensee must provide proof of purchase. Proof of purchase is defined as the following: registration number, purchase date, version and build number, and company or individual to which product is registered.
2. To have operating system, workstations, and local network installed and functional. R:BASE Technologies will NOT be responsible for resolving issues not pertaining to the software product.
3. Our support staff deals with advanced issues, therefore the person contacting R:BASE Technologies for assistance should be the system administrator or have other R:BASE/SQL experience and be able to understand and implement the advice given.

4. To have the database, application, and command files being reviewed, safely backed-up before attempting assistance. R:BASE Technologies will NOT be held responsible for lost data or corruption as a result of advice given.

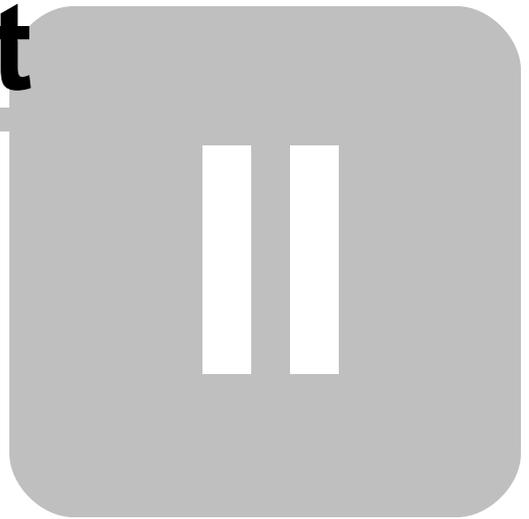
B. R:BASE TECHNOLOGIES, INC. RESPONSIBILITIES.

1. To provide quality assistance in a timely manner to aid in the installation of the product and elementary conversion of database, application, and command files within 30 days of the date of purchase.
2. To provide a reasonable solution for any solvable issue. Not all issues may be solved, and therefore we will acknowledge the existence of known issues, or bugs, which we are presently aware of, that have no reasonable work-around.

R:BASE Technologies reserves the right to limit the amount of support time allotted to a maximum of 2 HOURS during the 30-Day Complimentary Technical Support period. We also reserve the right to limit the quantity of calls from a particular licensee to 30 MINUTES in a single day. Issues are dealt with on a case-by-case basis, and are handled at the discretion of the support agent assigned to the case. Complimentary Support is limited to INSTALLATION and ELEMENTARY CONVERSION related issues ONLY. Our support hours are Monday through Friday, from 10:00 AM to 6:00 PM (EST).

For application, design, or advanced conversion assistance, R:BASE Technologies offers Technical Support Plans of various types to meet your needs. Please visit the Support page at <https://www.rbase.com/support> for details and pricing.

Part



2 Installation

2.1 System Requirements

The following system specifications are recommended for the optimal use of R:BASE and R:BASE-related software.

Workstation Hardware

- 2-Core 2GHz+ CPU
- 2 GB of available RAM (4 GB recommended)
- 2 GB of available hard disk space
- 1024x768 or higher resolution video adapter and display
- Standard mouse or compatible pointing device
- Standard keyboard

Server Hardware

- 2-Core 2GHz+ CPU
- 6 GB of available RAM (8 GB recommended)

Operating System

- Microsoft Windows 11 (Professional)
- Microsoft Windows 10 (Professional)
- Microsoft Windows Server 2025
- Microsoft Windows Server 2022
- Microsoft Windows Server 2019
- Microsoft Windows Server 2016

Network

- Ethernet infrastructure (Gigabyte recommended)
- Internet connection recommended, but not required, for license activation, software updates, and support
- Anti-virus programs should exclude the R:BASE program, and any add-on product, executable and database files

2.2 Things You Will Need

- License Key

Before launching the installer, it is recommended that you have your 32-character License Key readily available. The License Key is provided in a document, with the email message, when the software was originally purchased. If you have lost or misplaced your License Key, please contact our Support Staff by email at support@rbase.com.

- Internet Access

The computer where the software will be launched should have access to the Internet for activation. The Internet access is used to visit the R:BASE Technologies Web site to provide your required Activation Key.

In instances where the software will be installed on a computer that is not connected to the Internet, you must then contact R:BASE Technologies to provide information displayed on the computer screen. Please contact our Product Activation Staff by email at activationkey@rbase.com. The Registration Number must be provided. The Registration Number is displayed on the invoice/order slip, and within the email, when the software was originally purchased.

2.3 Software Installation

The installation of R:Documenter is fully automated, and does not require user intervention for the initial configuration.

Run the installer ".exe", provided by download, while physically sitting at the workstation to begin the installation process, and read the installer screens for licensing and other information as the program installs.

Installation Directory

C:\RBTI\RDocumenter11

Files Installed

RDocumenter11.rbm
RDocumenter11.chm
RDocumenter11.pdf
License.rtf
ReadMe.txt

Requirements:

Plugin

The R:Documenter 11 Plugin file (RDocumenter11.rbm) must be placed in the R:BASE 11 program directory (default: C:\RBTI\RBG11) or the runtime/compiled application directory.

2.4 Plugin Activation

R:BASE Plugins can be used to enhance, or extend R:BASE operations. Current R:BASE Plugins use the .RBM file extension.

To begin using any plugin product, the plugin must be registered for use.

The license type for R:BASE and R:BASE plugin products must match. The license keys supplied with Single Seat and 5 Seat plugin products will only be accepted within Single Seat and 5 Seat versions of R:BASE, and are not accepted within R:Compiler for R:BASE or Runtime for R:BASE programs. The same license structure is also in place for Runtime License Keys for plugin products, where the key will not be accepted within Single Seat and 5 Seat Licenses R:BASE.

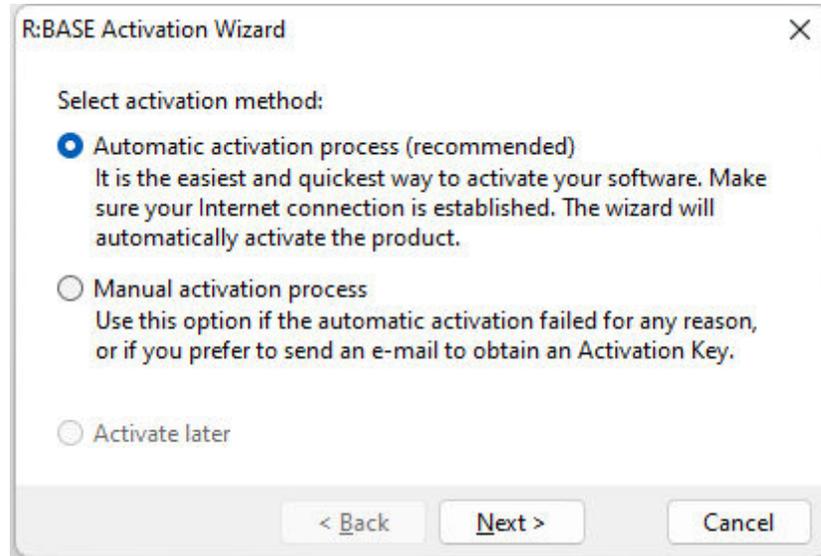
2.4.1 R:BASE

To begin using a plugin product, you must register the software within R:BASE by selecting "Help" > "Product Activation" from the main Menu Bar. In this window, select the "Add New" button where you can enter or copy and paste the License Key you received with your product.

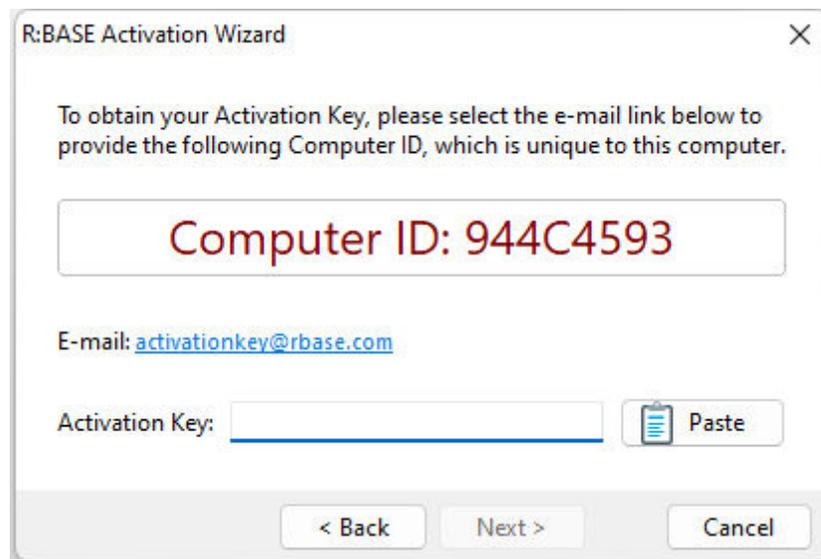
Only "Per Seat" License Keys are valid for this entry screen. All "Runtime" License Keys must be registered within R:Compiler for R:BASE or within Runtime for R:BASE separately.



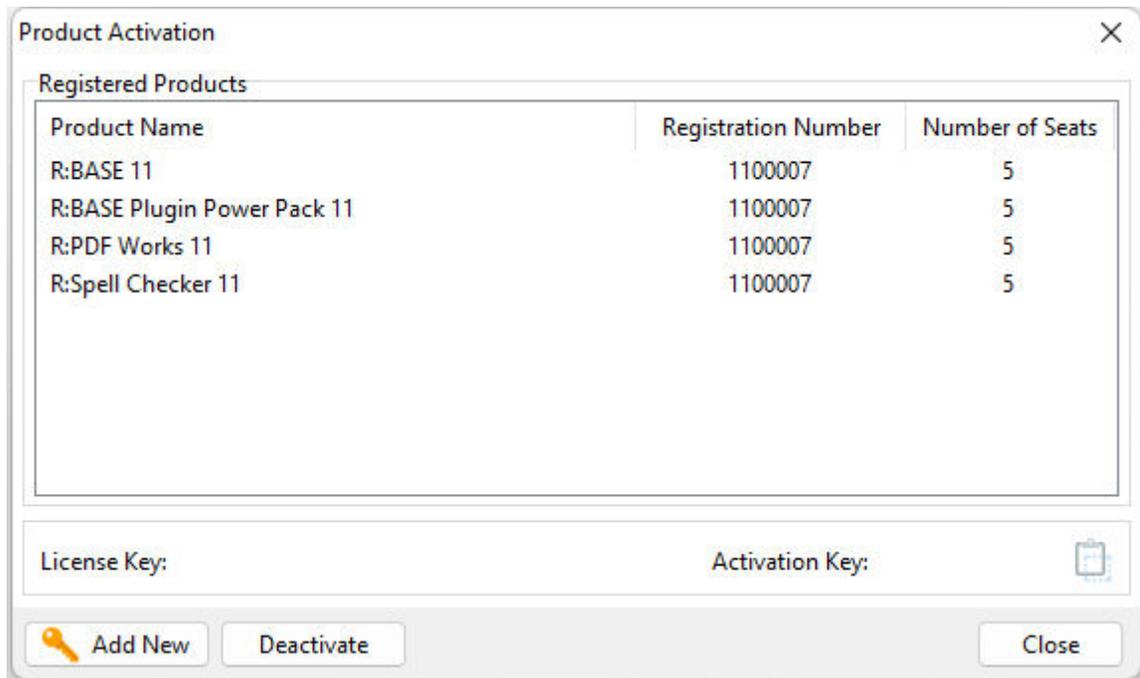
After entering the License Key, you will see a dialog to prompt for your activation method. The software can be activated automatically over the Internet, or manually by retrieving an Activation Key from R:BASE Technologies by email or over the phone. If you select "Later", you will be reminded each time R:BASE starts to activate your copy.



When activating the software manually, you select the e-mail link to launch your email client and send a pre-formatted message to R:BASE Technologies that will contain your License Key and the displayed Computer ID. You will need to provide your R:BASE Registration Number and Computer ID.



At any time, you can review your product information by starting R:BASE, and from the Menu Bar clicking on "Help" > "Product Activation". Your R:BASE Registration Number is displayed on the window. You can also enter additional License Keys for R:BASE add-on products.



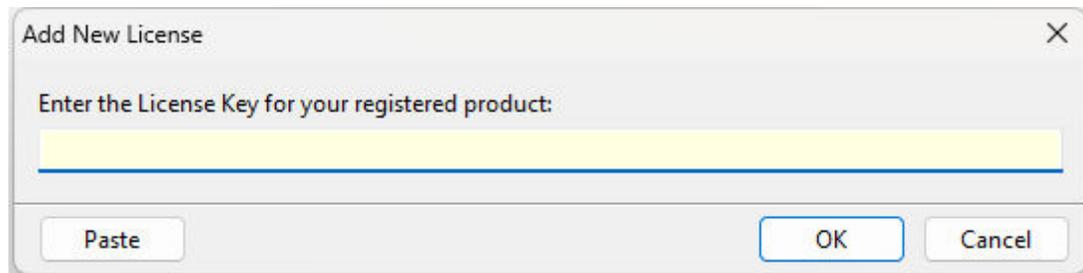
Please be advised that if you are activating multiple workstations, it is highly recommended that you keep records of the computer name, Computer ID and Activation Key for future reference. Access to this information will prove convenient in the event of a hardware failure or license transfer when uninstalling R:BASE.

Please see: [Uninstall/Reinstall](#)

2.4.2 R:Compiler for R:BASE

Runtime License Key

Runtime license keys for an R:BASE Plugin must be stored within the compiled executable. A specific Runtime License Key would be provided after your purchase of the Runtime software product. Adding a Runtime License to your project can be done by selecting the "Add License" button, and pasting the appropriate Runtime License Key into the displayed dialog window.



After a Runtime License is added as a resource, it will be assigned a "Resource ID". This ID consists of the word "License" and an incrementing value for the number of licenses added to the executable.

Plugin File (.RBM)

R:BASE Plugin files can be added and stored within the compiled executable or included within the R:BASE application directory. The Runtime license key pertaining to the R:BASE Plugin must be stored in the compiled executable.

Adding a Plugin to the list of resources can be performed by selecting the "Add Plugin" button on the Tool Bar. You will be prompted to locate the appropriate Plugin file with the .RBM file extension. After a Plugin file is added as a resource, it will be assigned a "Resource ID". This ID consists of the Plugin file name.

2.4.3 Runtime for R:BASE

After R:BASE Plugins are acquired for Runtime for R:BASE applications, the Plugin file must be included in the Runtime application folder, to be loaded when the Runtime application launches.

To load the Plugin, the License Key must be included into the Runtime for R:BASE session by adding the following PROPERTY command within the application startup file:

```
PROPERTY ADD_LICENSE #####-#####-#####-#####-#####-#####-#####-##### ' '
```

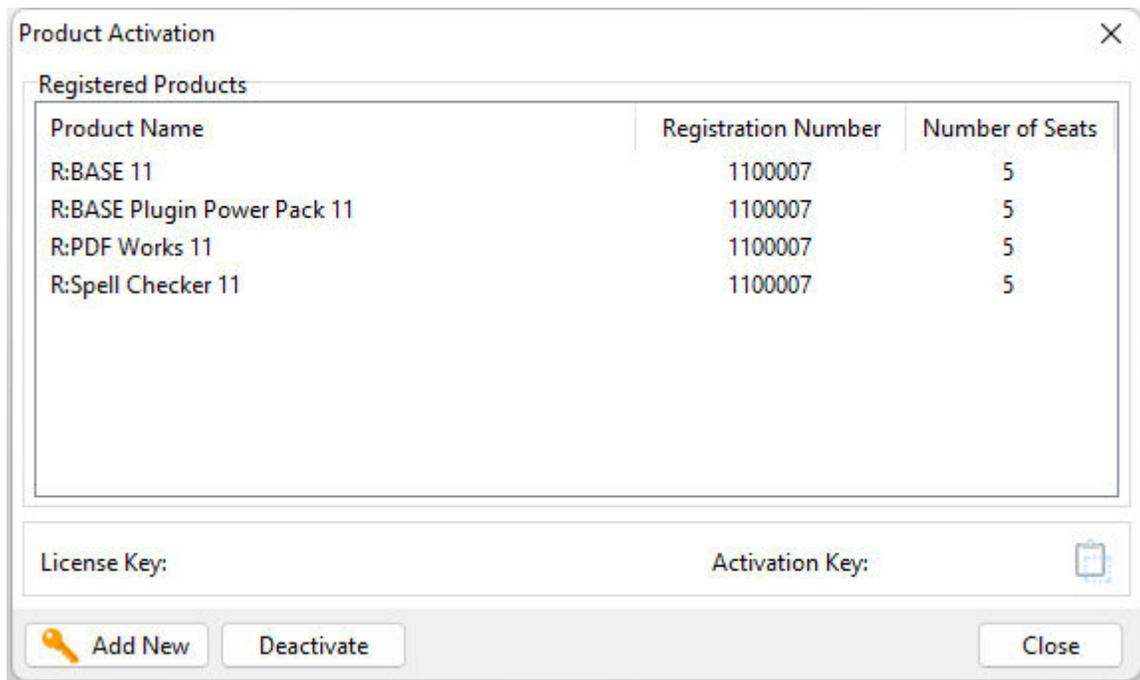
Part



3 Uninstall

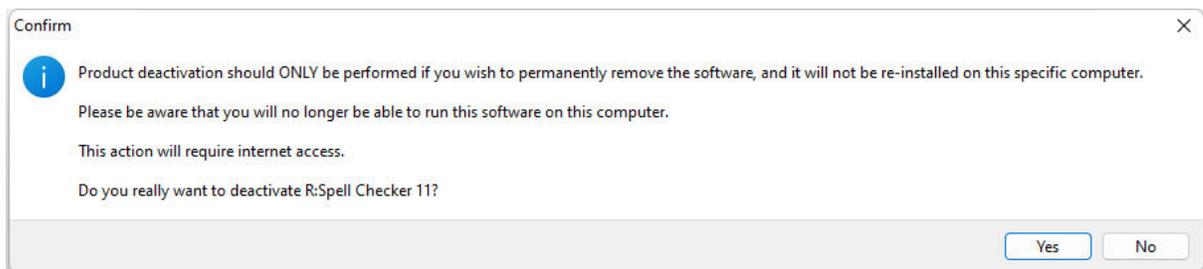
If a computer is no longer using R:Documenter, through license transfer or hardware failure, the Activation Key that was used on that computer must be submitted to R:BASE Technologies so we can then remove the Activation Key from our log. We will disable the Key, which will then free up that used activation. Once a key is reported to us as no longer in use and deactivated, it can no longer be used on that computer.

Product deactivation can be performed automatically from within R:BASE. To review your product information select "Help" > "Product Activation" from the Menu Bar. Here, the License Key and Activation Key for a selected product is available for review.



If the License Key for your product is not readily available for the license transfer, select the "Copy License Key" button to send your License Key to the clipboard.

To deactivate a listed product, select it and press the "Deactivate" button. The below confirmation dialog will appear. After selecting "Yes", the product will be removed from the list.



After completing the deactivation of the product, it can be successfully reinstalled and activated.

Part



4 Using R:Documenter

R:Documenter can be launched from within R:BASE by selecting "Utilities" > "Plugins" > "R:Documenter" from the main menu bar. The R:BASE session must be connected to a database for the menu option to be available. R:Documenter can also be launched use the following command syntax:

Syntax:

```
PLUGIN RDocumenter vResult|Parameters
```

Parameters:

DBNAME - specifies the database to connect. The value of this parameter is passed to a CONNECT statement, where all CONNECT command options can be used, (i.e. IDENTIFIED BY...).

OBJECT - specifies the types of reports to be generated. Valid values are SYSTABLE, TABLE, VIEW, SRVTABLE, DBF, SP, TRIGGER, FORM, REPORT, LABEL, PK, UNIQUE, FK, INDEX. Empty means print all. Multiple values can be specified-- separated by comma

FORMAT - specifies the output format. Valid values are PRINTER, PDF, BMP, EMF, XLS, GIF, HTML, JPG, ETXT, RTF, TXT, TIFF, XHTML, WMF. Default is PDF

PROGRESS - specifies to show/hide the progress dialog. Valid values are ON or OFF. Any value other than ON will set this to OFF

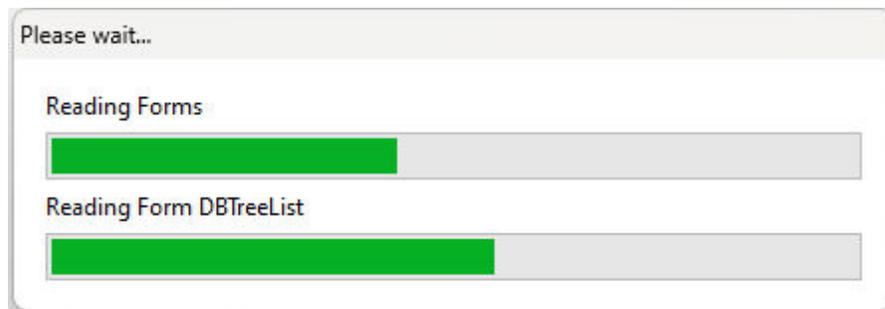
GUI - specifies to show/hide the main R:Documenter dialog. Valid values are ON or OFF. Any value other than ON will set this to OFF

DESTINATION - specifies destination folder for the output

Note:

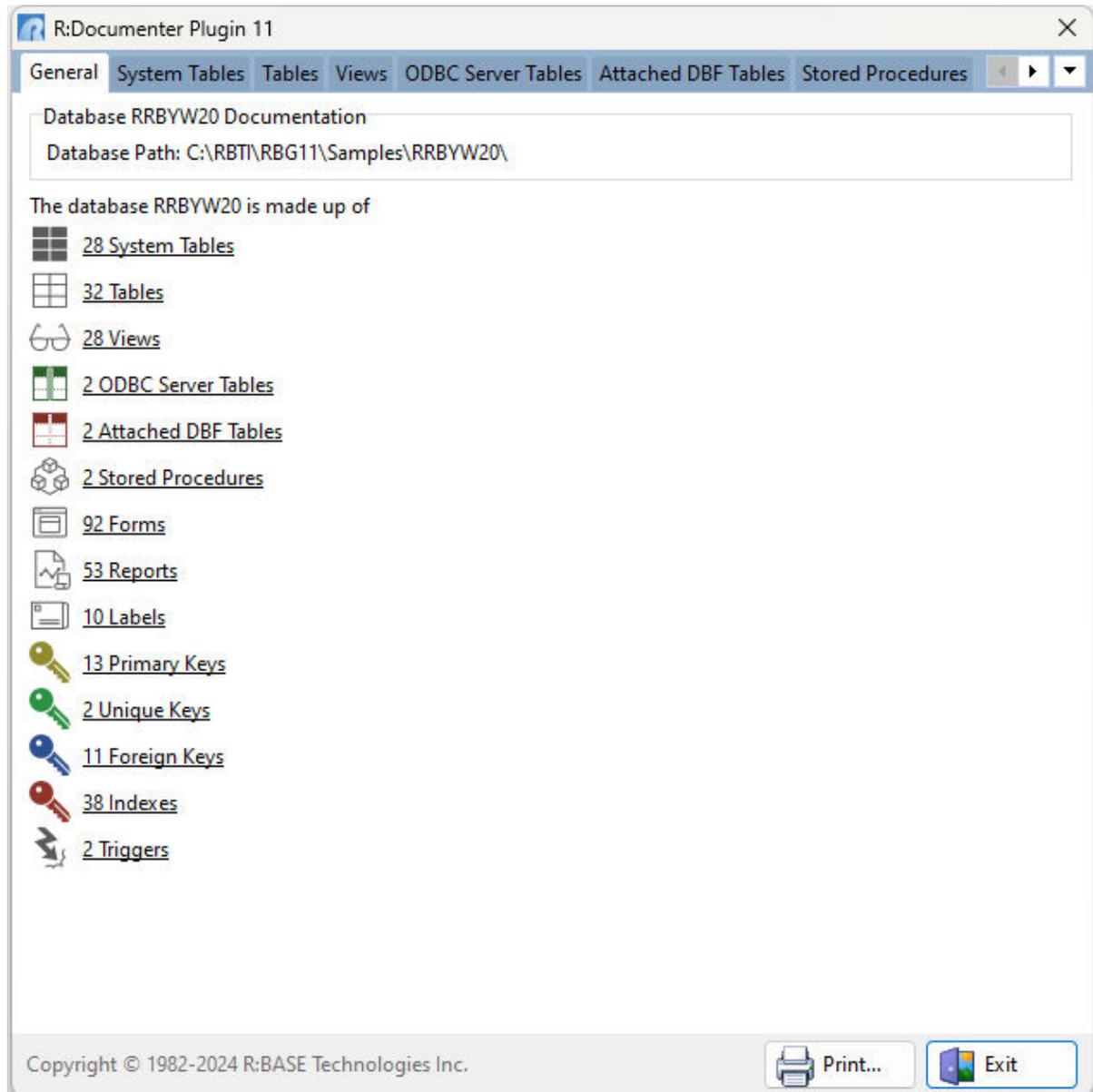
- Returned variable name and parameters must be separated by a "|" pipe symbol.

When launched, the R:Documenter will automatically begin reading the database structure.



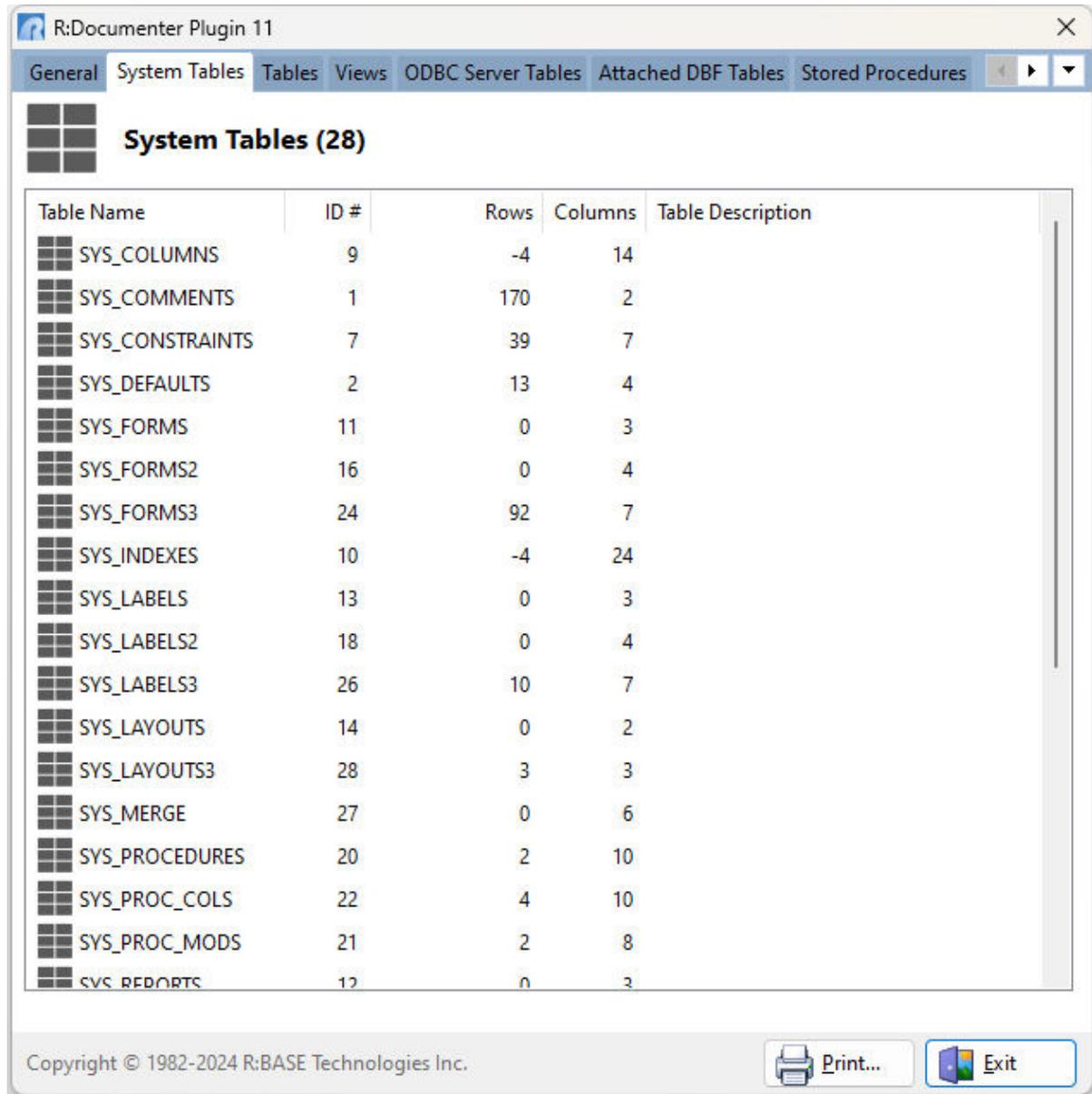
4.1 General

The "General" tab in the R:Documenter window will display the connected database name and path across the top of the page. The middle of the window will display exactly what the database is made of starting with System Tables all the way down to Triggers. Next to each item that comprises the database, the number of each are displayed as well.



4.2 System Tables

The "System Tables" tab will display the list of System Tables for the database along with the ID#, number of rows, number of columns, and table description.



The screenshot shows the R:Documenter Plugin 11 interface with the "System Tables" tab selected. The window title is "R:Documenter Plugin 11". The tabs include "General", "System Tables", "Tables", "Views", "ODBC Server Tables", "Attached DBF Tables", and "Stored Procedures". The "System Tables (28)" tab is active, displaying a table with the following data:

Table Name	ID #	Rows	Columns	Table Description
SYS_COLUMNS	9	-4	14	
SYS_COMMENTS	1	170	2	
SYS_CONSTRAINTS	7	39	7	
SYS_DEFAULTS	2	13	4	
SYS_FORMS	11	0	3	
SYS_FORMS2	16	0	4	
SYS_FORMS3	24	92	7	
SYS_INDEXES	10	-4	24	
SYS_LABELS	13	0	3	
SYS_LABELS2	18	0	4	
SYS_LABELS3	26	10	7	
SYS_LAYOUTS	14	0	2	
SYS_LAYOUTS3	28	3	3	
SYS_MERGE	27	0	6	
SYS_PROCEDURES	20	2	10	
SYS_PROC_COLS	22	4	10	
SYS_PROC_MODS	21	2	8	
SYS_REPORTS	12	0	3	

At the bottom of the window, there is a copyright notice: "Copyright © 1982-2024 R:BASE Technologies Inc." and two buttons: "Print..." and "Exit".

Any System Table can be selected for information displaying the column names, ID#, and data type for the column.

General System Tables Tables Views ODBC Server Tables Attached DBF Tables Stored Procedures



System Tables (28)

System Table SYS_FORMS3

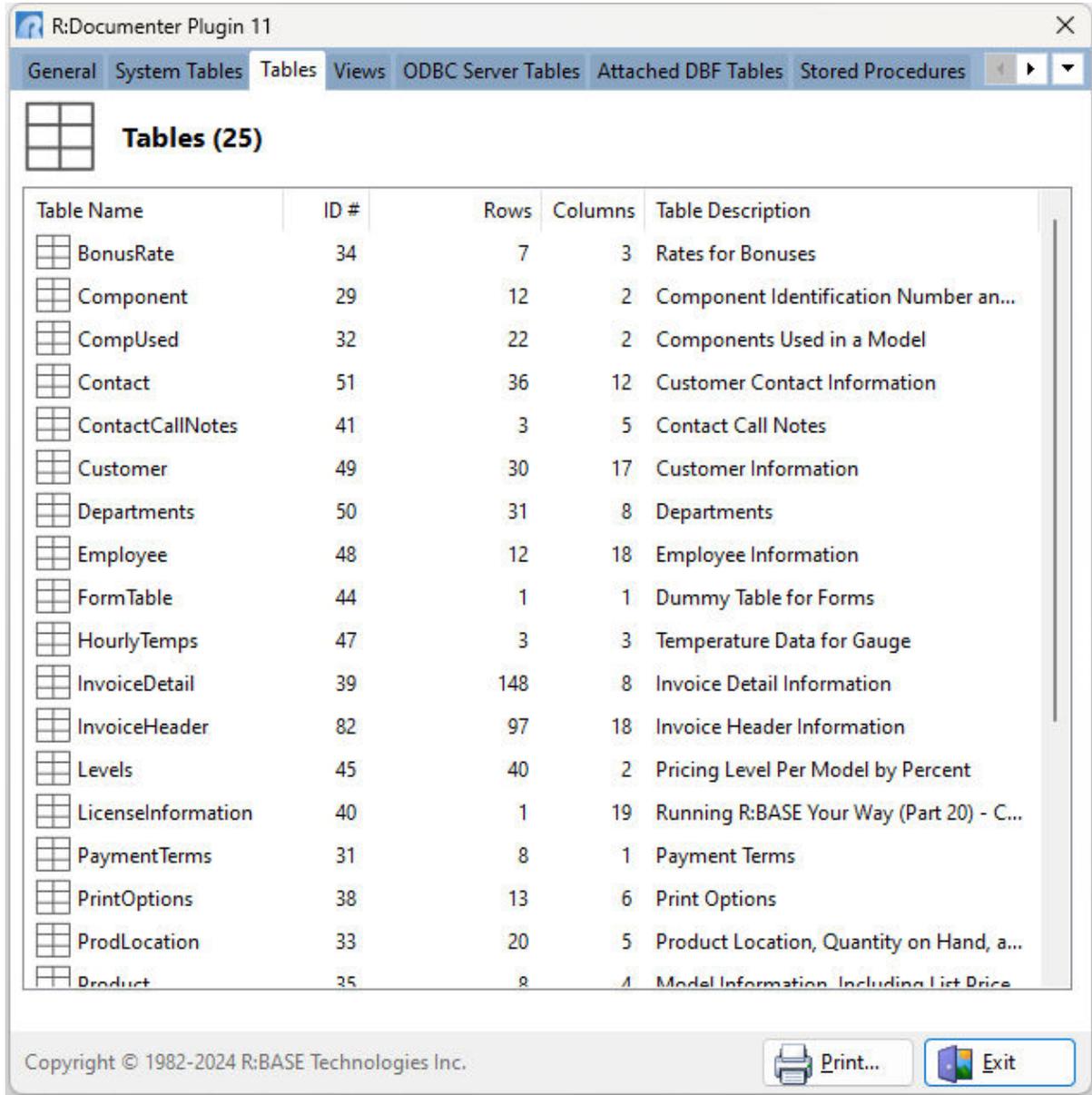
[← Back to Table List](#)

Columns(7):

Column Name	ID #	Data Type
SYS_FORM_NAME	157	TEXT(128)
SYS_TABLE_NAME	158	TEXT(128)
SYS_COMMENT	159	NOTE(0)
SYS_DATA	160	VARBIT
SYS_TABLES_DEF	161	VARBIT
SYS_FORM_MOD_TS	162	DATETIME
SYS_FORM_VERSION	163	INTEGER

4.3 Tables

The "Tables" tab will display the list of Tables for the database along with the ID#, number of rows, number of columns, and table description.



The screenshot shows the 'Tables' tab in the R:Documenter Plugin 11 interface. The window title is 'R:Documenter Plugin 11'. The 'Tables' tab is selected, and the title of the content area is 'Tables (25)'. Below the title is a table listing 25 tables with the following columns: Table Name, ID #, Rows, Columns, and Table Description. The table is scrollable, and the bottom of the list is partially cut off. At the bottom of the window, there is a copyright notice 'Copyright © 1982-2024 R:BASE Technologies Inc.' and two buttons: 'Print...' and 'Exit'.

Table Name	ID #	Rows	Columns	Table Description
BonusRate	34	7	3	Rates for Bonuses
Component	29	12	2	Component Identification Number an...
CompUsed	32	22	2	Components Used in a Model
Contact	51	36	12	Customer Contact Information
ContactCallNotes	41	3	5	Contact Call Notes
Customer	49	30	17	Customer Information
Departments	50	31	8	Departments
Employee	48	12	18	Employee Information
FormTable	44	1	1	Dummy Table for Forms
HourlyTemps	47	3	3	Temperature Data for Gauge
InvoiceDetail	39	148	8	Invoice Detail Information
InvoiceHeader	82	97	18	Invoice Header Information
Levels	45	40	2	Pricing Level Per Model by Percent
LicenseInformation	40	1	19	Running R:BASE Your Way (Part 20) - C...
PaymentTerms	31	8	1	Payment Terms
PrintOptions	38	13	6	Print Options
ProdLocation	33	20	5	Product Location, Quantity on Hand, a...
Product	35	8	4	Model Information, Including List Price

Any table can be selected for information displaying the column names, ID#, data type, description and default value for the column.

General System Tables **Tables** Views ODBC Server Tables Attached DBF Tables Stored Procedures

 **Tables (25)**

Table Customer [← Back to Table List](#)

Columns(17):

Column Name	ID #	Data Type	Column Description	Default
CustID	299	INTEGER AUTONUM next = 137	Customer Identificatio...	
Company	300	TEXT(40)	Customer Company N...	

Primary Key Column:

#	Column Name	PK Min Value	PK Max Value	Constraint Name
1	CustID	101	130	#39

Custom Messages

On attempt to duplicate PK column(s)
The customer id number must be unique for this table.

On attempt to delete PK row referenced by another table:
This customer id number is being referenced in another table

On attempt to change PK value referenced by another table:
This value is being reference in another table.

The PK is referenced by the following Foreign Key:

FK Table Name	FK Column Name	Constraint Name
Contact	CustID	#54

Further down the window displayed primary keys defined for the table and the custom messages for the constraint. At the bottom, the foreign keys are listed with their referenced table and column and all indexes are listed with the index name, column, NULL value, unique setting, length, order direction, duplicate factor, adjacency factor, and the type of index it is (ie. Primary Key = PK, Foreign Key = FK, Unique Key = UK, etc.).

General System Tables **Tables** Views ODBC Server Tables Attached DBF Tables Stored Procedures

 **Tables (25)**

Table Customer [← Back to Table List](#)

Foreign Key:

FK Column	FK Name	Ref'd Table	Message on Illegal Ins...	Message on Illegal ...

Indexes(2):

Index Name	Column	Nulls	Unique	Length	Dir	Dup.	Adj.	Type
#39	CustID	NOT N...	Yes	255	ASC	1	1	PK
CustState	CustState	Null OK	No	255	ASC	2.142857	1	I

Rule:

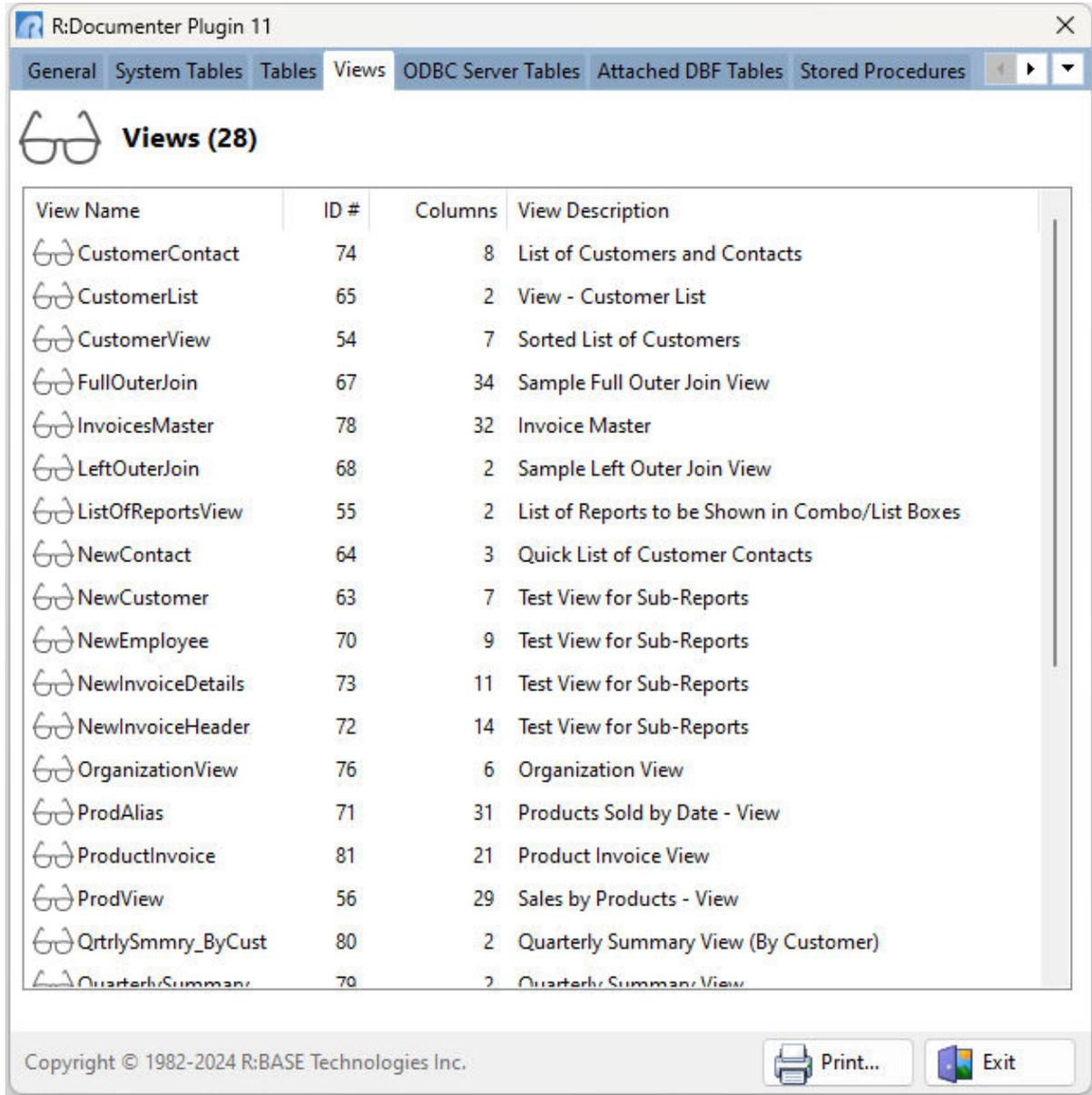
Flags	Message	Where

Triggers(0):

Trigger Type	Stored Procedure

4.4 Views

The "Views" tab will display the list of Views for the database along with the ID#, number of columns, and view description.



The screenshot shows the 'Views' tab in the R:Documenter Plugin 11 interface. The window title is 'R:Documenter Plugin 11'. The tab bar includes 'General', 'System Tables', 'Tables', 'Views', 'ODBC Server Tables', 'Attached DBF Tables', and 'Stored Procedures'. The 'Views' tab is active, displaying a list of 28 views. The list is organized into a table with four columns: View Name, ID #, Columns, and View Description. Each view name is preceded by a glasses icon. At the bottom of the window, there is a copyright notice 'Copyright © 1982-2024 R:BASE Technologies Inc.' and two buttons: 'Print...' and 'Exit'.

View Name	ID #	Columns	View Description
CustomerContact	74	8	List of Customers and Contacts
CustomerList	65	2	View - Customer List
CustomerView	54	7	Sorted List of Customers
FullOuterJoin	67	34	Sample Full Outer Join View
InvoicesMaster	78	32	Invoice Master
LeftOuterJoin	68	2	Sample Left Outer Join View
ListOfReportsView	55	2	List of Reports to be Shown in Combo/List Boxes
NewContact	64	3	Quick List of Customer Contacts
NewCustomer	63	7	Test View for Sub-Reports
NewEmployee	70	9	Test View for Sub-Reports
NewInvoiceDetails	73	11	Test View for Sub-Reports
NewInvoiceHeader	72	14	Test View for Sub-Reports
OrganizationView	76	6	Organization View
ProdAlias	71	31	Products Sold by Date - View
ProductInvoice	81	21	Product Invoice View
ProdView	56	29	Sales by Products - View
QtrlySmmry_ByCust	80	2	Quarterly Summary View (By Customer)
QuarterlySummary	79	2	Quarterly Summary View

Any view can be selected for information displaying the view description, column aliases with the number of columns, and the SQL query syntax.

General System Tables Tables **Views** ODBC Server Tables Attached DBF Tables Stored Procedures

 **Views (28)**

View InvoicesMaster [← Back to View List](#)

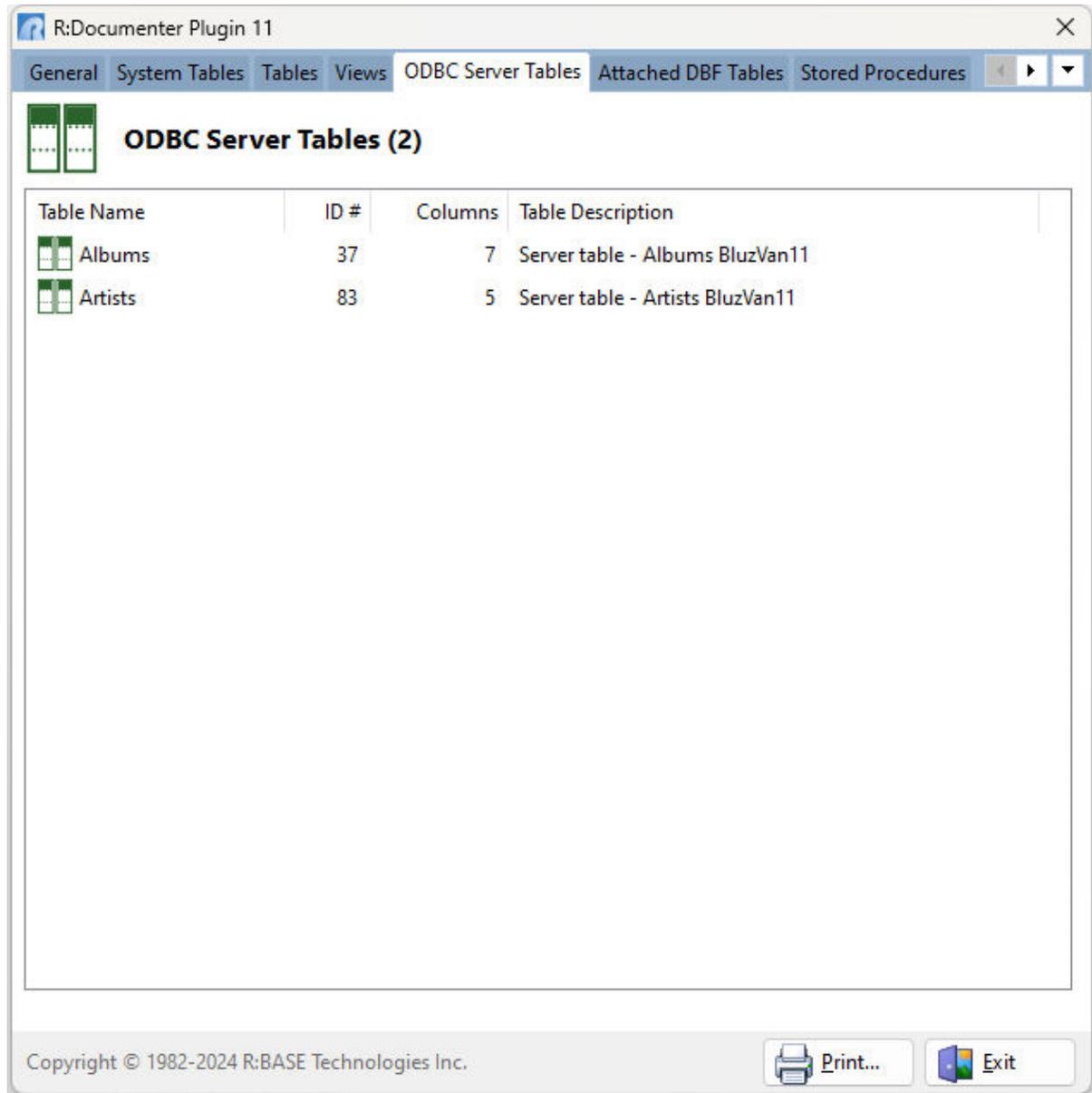
Description:
Invoice Master

Column Aliases(32 Columns):
(Column aliases not used in view.)

Query:
SELECT T1.TransID AS TransID,T1.CustID AS CustID,T1.EmpID AS EmpID,T1.TransDate AS
TransDate,T1.BillToCompany AS BillToCompany,(T1.BillToAddress + ',' + T1.BillToCity + '' + T1.BillToState + '' +
T1.BillToZip) AS BillToAddress,T1.BillToState AS BillToState,T1.BillToZip AS BillToZip,T1.ShipToCompany AS
ShipToCompany,(T1.ShipToAddress + ',' + T1.ShipToCity + '' + T1.ShipToState + '' + T1.ShipToZip) AS
ShipToAddress,T1.ShipToState AS ShipToState,T1.ShipToZip AS ShipToZip,T1.NetAmount AS
NetAmount,T1.Freight AS Freight,T1.Tax AS Tax,T1.InvoiceTotal AS InvoiceTotal,IFEQ (T2.DetailNum,1,1,0) AS
InvoiceCounter,T2.DetailNum AS DetailNum,T2.Model AS Model,T2.Units AS Units,T2.Price AS Price,T2.Discount
AS Discount,T2.SalePrice AS SalePrice,T2.ExtPrice AS ExtPrice,T3.ProdName AS ProdName,T3.ProdDesc AS
ProdDesc,T3.ListPrice AS ListPrice,(T4.EmpFName + '' + T4.EmplName) AS EmpName,T4.EmpPhone AS
EmpPhone,T4.EmpExt AS EmpExt,T4.EMailAddress AS EMailAddress,T4.EmployeePhoto AS EmployeePhoto
FROM InvoicesMaster T1,Customers T2,Employees T3,Products T4

4.5 ODBC Server Tables

The "ODBC Server Tables" tab will display the list of ODBC Server Tables for the database along with the ID#, number of rows, number of columns, and table description.



Any ODBC Server Table can be selected for information displaying the column names, ID#, data type, description and default value for the column.

General System Tables Tables Views ODBC Server Tables Attached DBF Tables Stored Procedures

ODBC Server Tables (2)

Server Table Albums [Back to Table List](#)

Columns(7):

Column Name	ID #	Data Type	Column Description	Default
Album_ID	213	INTEGER		
AlbumTitle	214	TEXT(40)		

Primary Key Column:

Custom Messages

On attempt to duplicate PK column(s)

On attempt to delete PK row referenced by another table:

On attempt to change PK value referenced by another table:

The PK is referenced by the following Foreign Key:

FK Table Name	FK Column Name	Constraint Name
---------------	----------------	-----------------

4.6 Attached DBF Tables

The "Attached DBF Tables" tab will display the list of attached dBase Tables for the database along with the ID#, number of rows, number of columns, and table description.

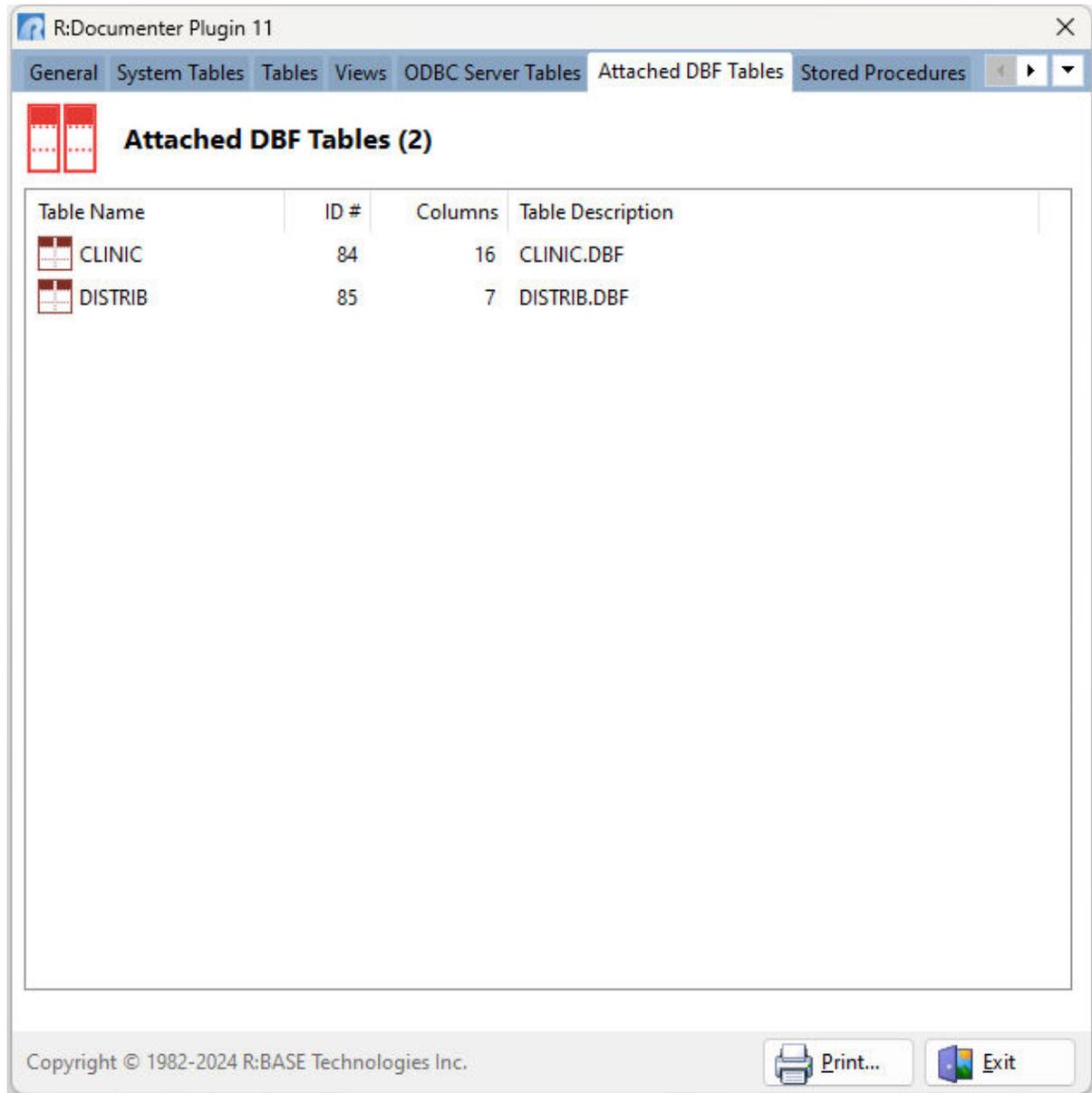


Table Name	ID #	Columns	Table Description
CLINIC	84	16	CLINIC.DBF
DISTRIB	85	7	DISTRIB.DBF

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Any DBF table can be selected for information displaying the column names, ID#, data type, description and default value for the column.

Views ODBC Server Tables Attached DBF Tables Stored Procedures Forms Reports Labels



Attached DBF Tables (2)

dBase Table DISTRIB

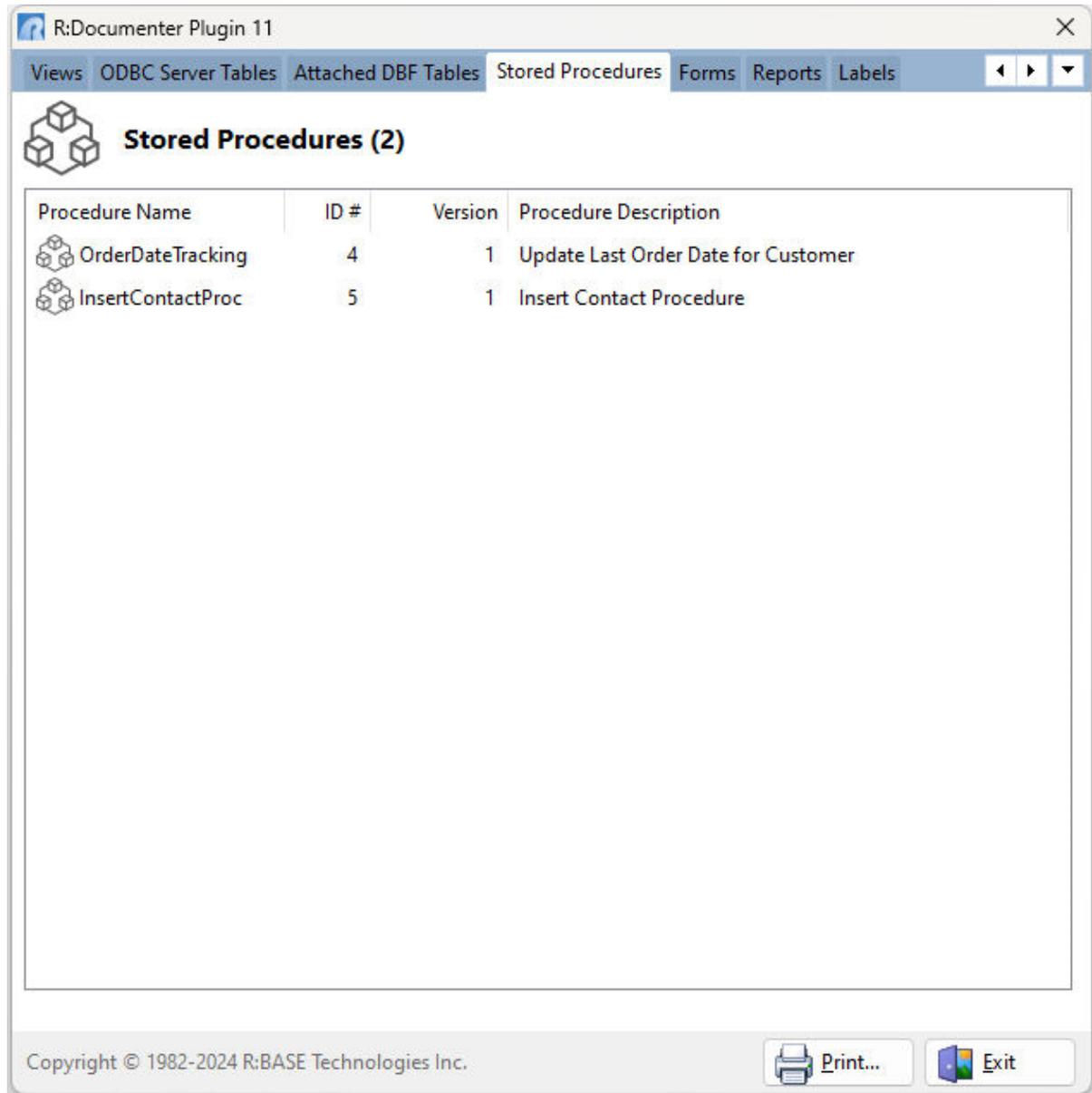
[← Back to Table List](#)

Columns(7):

Column Name	ID #	Data Type	Column Description	Default
CLCODE	390	DOUBLE		
FIRSTNO	391	DOUBLE		
LASTNO	392	DOUBLE		
TOTALOT	393	DOUBLE		
RECTYPE	394	TEXT(1)		
TRANDATE	395	DATE		
DUSERID	396	TEXT(2)		

4.7 Stored Procedures

The "Stored Procedure" tab will display the list of Stored Procedures for the database along with the ID#, the version setting, and procedure description.



Procedure Name	ID #	Version	Procedure Description
 OrderDateTracking	4	1	Update Last Order Date for Customer
 InsertContactProc	5	1	Insert Contact Procedure

Any stored procedure can be selected for information displaying the parameters, history, and source code.

Views ODBC Server Tables Attached DBF Tables **Stored Procedures** Forms Reports Labels

 **Stored Procedures (2)**

Procedure OrderDateTracking [← Back to Procedure List](#)

Parameter:

Parameter	ID #	Data Type	Parameter Description
RETURN	11	INTEGER	

Modification History:

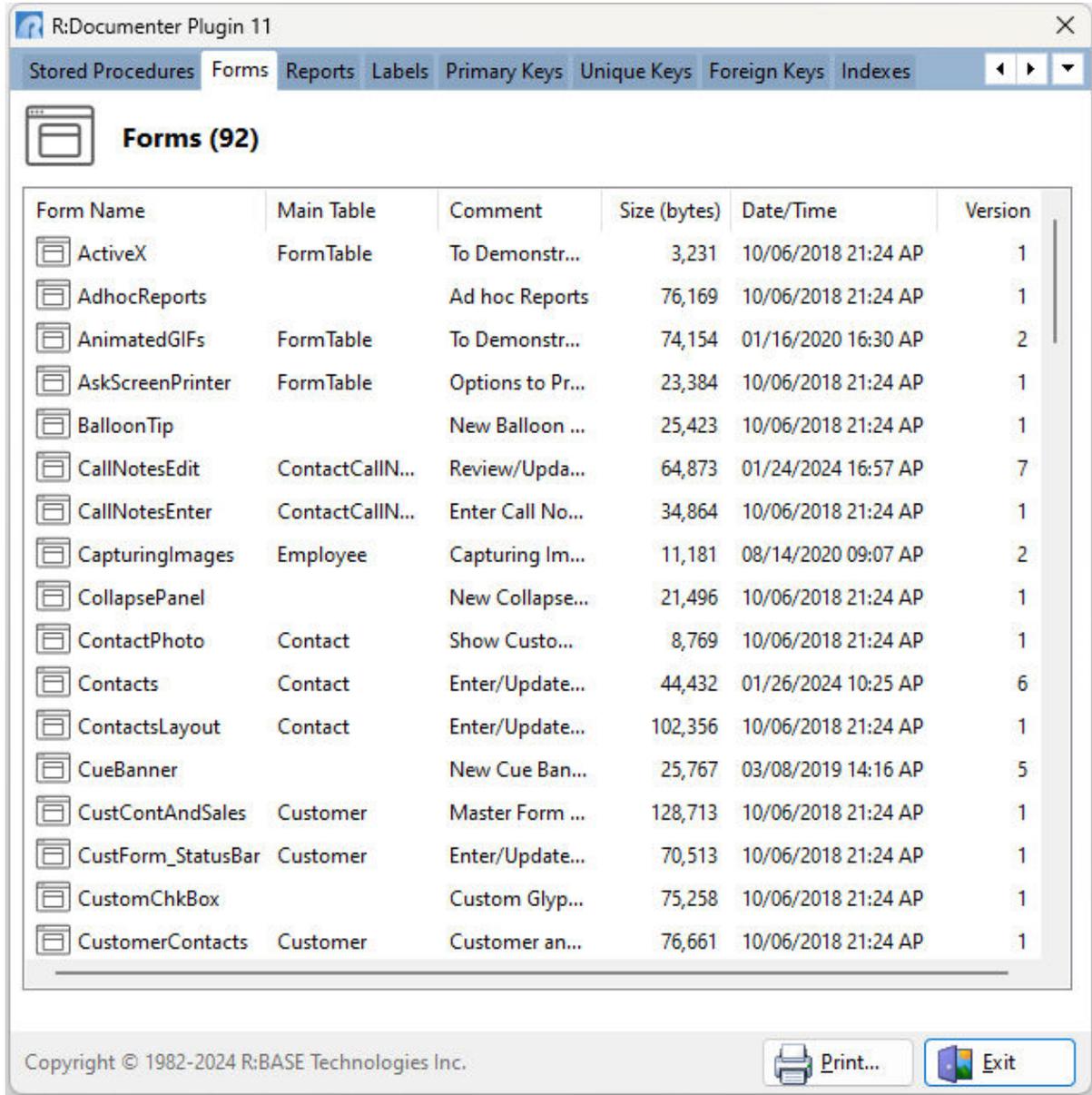
ID #	Version	User Name	Description	Stored
6	1	USER20171221161...	Update Last Order Date for Cust...	12/28/2017 5:37:58 PM

Source Code:

```
SELECT TransID,CustID,TransDate +
  INTO vTransID INDICATOR vInd1, vCustID INDICATOR vInd2, +
  vTransDate INDICATOR vInd3 +
  FROM InvoiceHeader WHERE CURRENT OF SYS_NEW
UPDATE Customer SET LastOrderDate = TransDate
```

4.8 Forms

The "Forms" tab will display the list of Forms for the database along with the table the form is based upon and the form description.



The screenshot shows the 'Forms' tab in the R:Documenter Plugin 11 interface. The window title is 'R:Documenter Plugin 11'. The 'Forms' tab is selected, and the list shows 92 forms. The table below is a representation of the data shown in the screenshot.

Form Name	Main Table	Comment	Size (bytes)	Date/Time	Version
ActiveX	FormTable	To Demonstr...	3,231	10/06/2018 21:24 AP	1
AdhocReports		Ad hoc Reports	76,169	10/06/2018 21:24 AP	1
AnimatedGIFs	FormTable	To Demonstr...	74,154	01/16/2020 16:30 AP	2
AskScreenPrinter	FormTable	Options to Pr...	23,384	10/06/2018 21:24 AP	1
BalloonTip		New Balloon ...	25,423	10/06/2018 21:24 AP	1
CallNotesEdit	ContactCallN...	Review/Upda...	64,873	01/24/2024 16:57 AP	7
CallNotesEnter	ContactCallN...	Enter Call No...	34,864	10/06/2018 21:24 AP	1
CapturingImages	Employee	Capturing Im...	11,181	08/14/2020 09:07 AP	2
CollapsePanel		New Collapse...	21,496	10/06/2018 21:24 AP	1
ContactPhoto	Contact	Show Custo...	8,769	10/06/2018 21:24 AP	1
Contacts	Contact	Enter/Update...	44,432	01/26/2024 10:25 AP	6
ContactsLayout	Contact	Enter/Update...	102,356	10/06/2018 21:24 AP	1
CueBanner		New Cue Ban...	25,767	03/08/2019 14:16 AP	5
CustContAndSales	Customer	Master Form ...	128,713	10/06/2018 21:24 AP	1
CustForm_StatusBar	Customer	Enter/Update...	70,513	10/06/2018 21:24 AP	1
CustomChkBox		Custom Glyp...	75,258	10/06/2018 21:24 AP	1
CustomerContacts	Customer	Customer an...	76,661	10/06/2018 21:24 AP	1

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Any form can be selected for information displaying the list of form variables (if defined), the table they are based upon, the data type and expression. Also displayed are the types of controls on the form, their description, whether or not an EEP is assigned to that control, and if the control has a Component ID defined.



Forms (92)

Form CallNotesEnter

[← Back to Form List](#)

Form Table: ContactCallNotes

Slave Tables(2)

Customer
Contact

Form Variable:

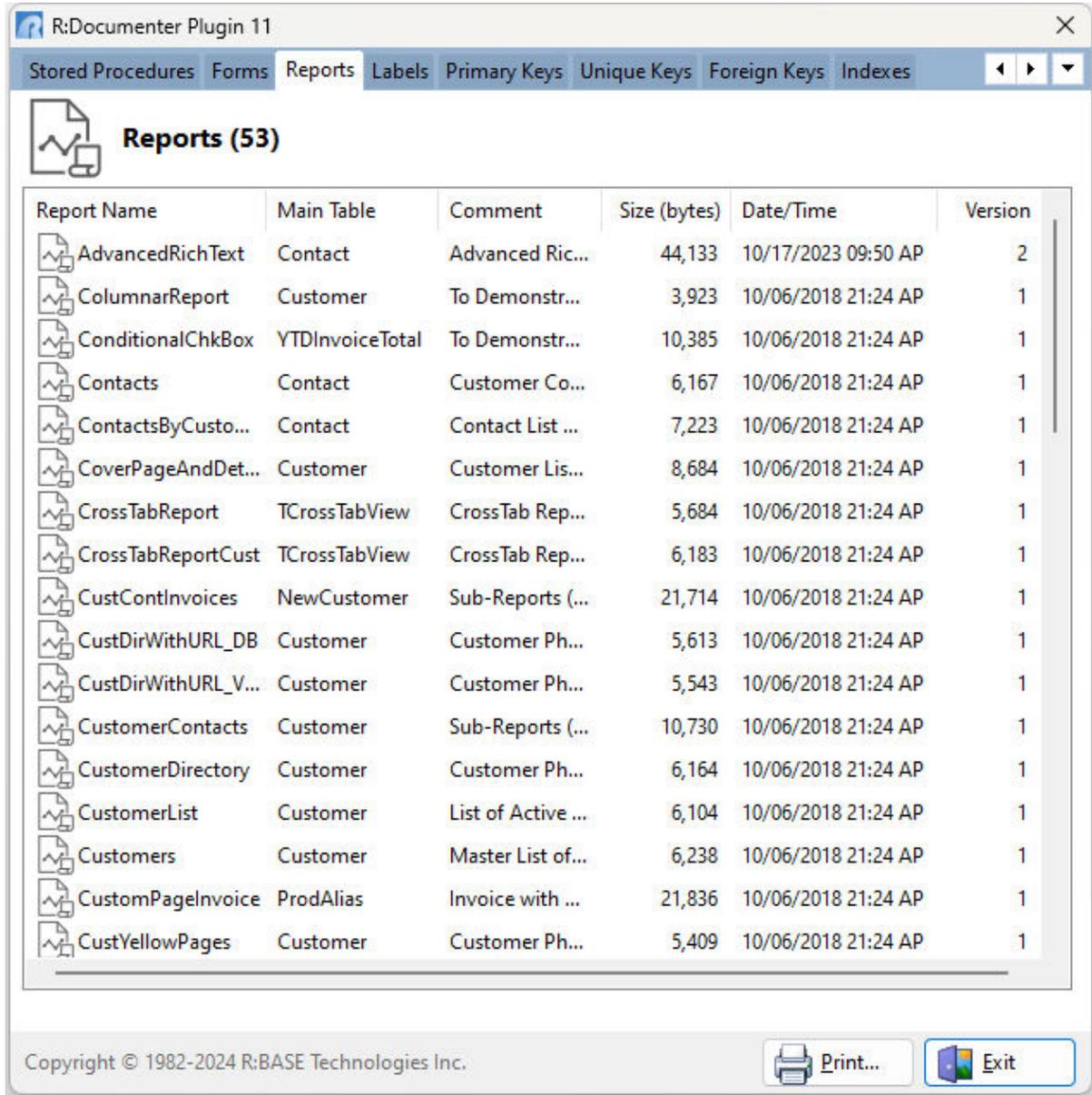
Variable Name	Table Name	Datatype	Expression
vCompany	TEXT	Company ...	Contact

Form Controls(22):

Control Class	Description	Component ID	EEPs	Popup Menus
R:BASE Form			Yes	No
Static Text	Caption: 'Conta...		No	No
Variable Label	Variable Name: '...		No	No
Enhanced Grou...	Caption: 'Select ...	GB_Panel1	No	No
Variable Looku...	Variable Name: '...	ComboBox_C...	No	No

4.9 Reports

The "Reports" tab will display the list of Reports for the database along with the table the report is based upon and the report description.



The screenshot shows the "Reports (53)" tab in the R:Documenter Plugin 11 interface. The interface includes a menu bar with options: Stored Procedures, Forms, Reports, Labels, Primary Keys, Unique Keys, Foreign Keys, and Indexes. Below the menu bar is a list of reports with the following columns: Report Name, Main Table, Comment, Size (bytes), Date/Time, and Version.

Report Name	Main Table	Comment	Size (bytes)	Date/Time	Version
AdvancedRichText	Contact	Advanced Ric...	44,133	10/17/2023 09:50 AP	2
ColumnarReport	Customer	To Demonstr...	3,923	10/06/2018 21:24 AP	1
ConditionalChkBox	YTDInvoiceTotal	To Demonstr...	10,385	10/06/2018 21:24 AP	1
Contacts	Contact	Customer Co...	6,167	10/06/2018 21:24 AP	1
ContactsByCusto...	Contact	Contact List ...	7,223	10/06/2018 21:24 AP	1
CoverPageAndDet...	Customer	Customer Lis...	8,684	10/06/2018 21:24 AP	1
CrossTabReport	TCrossTabView	CrossTab Rep...	5,684	10/06/2018 21:24 AP	1
CrossTabReportCust	TCrossTabView	CrossTab Rep...	6,183	10/06/2018 21:24 AP	1
CustContInvoices	NewCustomer	Sub-Reports (...)	21,714	10/06/2018 21:24 AP	1
CustDirWithURL_DB	Customer	Customer Ph...	5,613	10/06/2018 21:24 AP	1
CustDirWithURL_V...	Customer	Customer Ph...	5,543	10/06/2018 21:24 AP	1
CustomerContacts	Customer	Sub-Reports (...)	10,730	10/06/2018 21:24 AP	1
CustomerDirectory	Customer	Customer Ph...	6,164	10/06/2018 21:24 AP	1
CustomerList	Customer	List of Active ...	6,104	10/06/2018 21:24 AP	1
Customers	Customer	Master List of...	6,238	10/06/2018 21:24 AP	1
CustomPageInvoice	ProdAlias	Invoice with ...	21,836	10/06/2018 21:24 AP	1
CustYellowPages	Customer	Customer Ph...	5,409	10/06/2018 21:24 AP	1

At the bottom of the window, there is a copyright notice: "Copyright © 1982-2024 R:BASE Technologies Inc." and two buttons: "Print..." and "Exit".

Any report can be selected for information displaying the list of report variables (if defined), the table they are based upon, the data type, the report band section it is located, and expression. Also displayed are the types of controls on the report, their description, whether or not an EEP is assigned to that control, and if the control has a Component ID defined.

Attached DBF Tables Stored Procedures Forms Reports Labels Primary Keys Foreign Keys


Reports (53)

Report ContactsByCustomer

← Back to Report List

Report Table: Contact

Slave Tables(0)

Report Variables(2):

Variable Name	Variable Type	Variable Expression	Section
vContactName	TEXT	(ContLName+', '&ContFName)	D
vCompany	TEXT	Company IN Customer WHERE CustID = C...	PH

Report Controls(32):

Control Class	Description	Compone...	EEPs
Report	Table: 'Contact'		No
Page Header Band	Height: 32015		No
Shape	Left: 1588, Top: 23019, Width: 187...		No
Label	Caption: 'Contact Name', Left: 13...		No
Label	Caption: 'Contact List', Left: 7540...		No

4.10 Labels

The "Labels" tab will display the list of Labels for the database along with the table the label is based upon and the label description.

Labels (10)

Label Name	Main Table	Comment	Size (bytes)	Date/Time	Version
ContactLabel	Contact	Contact Addr...	44,133	10/17/2023 09:50 AP	2
CustomerLabels	Customer	Customer La...	3,923	10/06/2018 21:24 AP	1
CustShippingLabel	Customer	Customer Shi...	10,385	10/06/2018 21:24 AP	1
CustShpLabl	Customer	2DBarcode S...	6,167	10/06/2018 21:24 AP	1
EmployeeLabel	Employee	Employee La...	7,223	10/06/2018 21:24 AP	1
EmployeeNameTa...	Employee	Employee Na...	8,684	10/06/2018 21:24 AP	1
LabelExpressions	Customer	Customer La...	5,684	10/06/2018 21:24 AP	1
ProductLabels	Product	Product Labe...	6,183	10/06/2018 21:24 AP	1
SecureNmTag	Employee	2DBarcode Se...	21,714	10/06/2018 21:24 AP	1
SecurityNameTags	Employee	Employee Na...	5,613	10/06/2018 21:24 AP	1

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Any label can be selected for information displaying the list of label variables (if defined), the table they are based upon, the data type, the label band section it is located, and expression. Also displayed are the types of controls on the label, their description, whether or not an EEP is assigned to that control, and if the control has a Component ID defined.

Attached DBF Tables Stored Procedures Forms Reports **Labels** Primary Keys Foreign Keys ◀ ▶ ▾

 **Labels (10)**

Label CustShpLbl [← Back to Label List](#)

Label Table: Customer

Slave Table:

Label Variable:

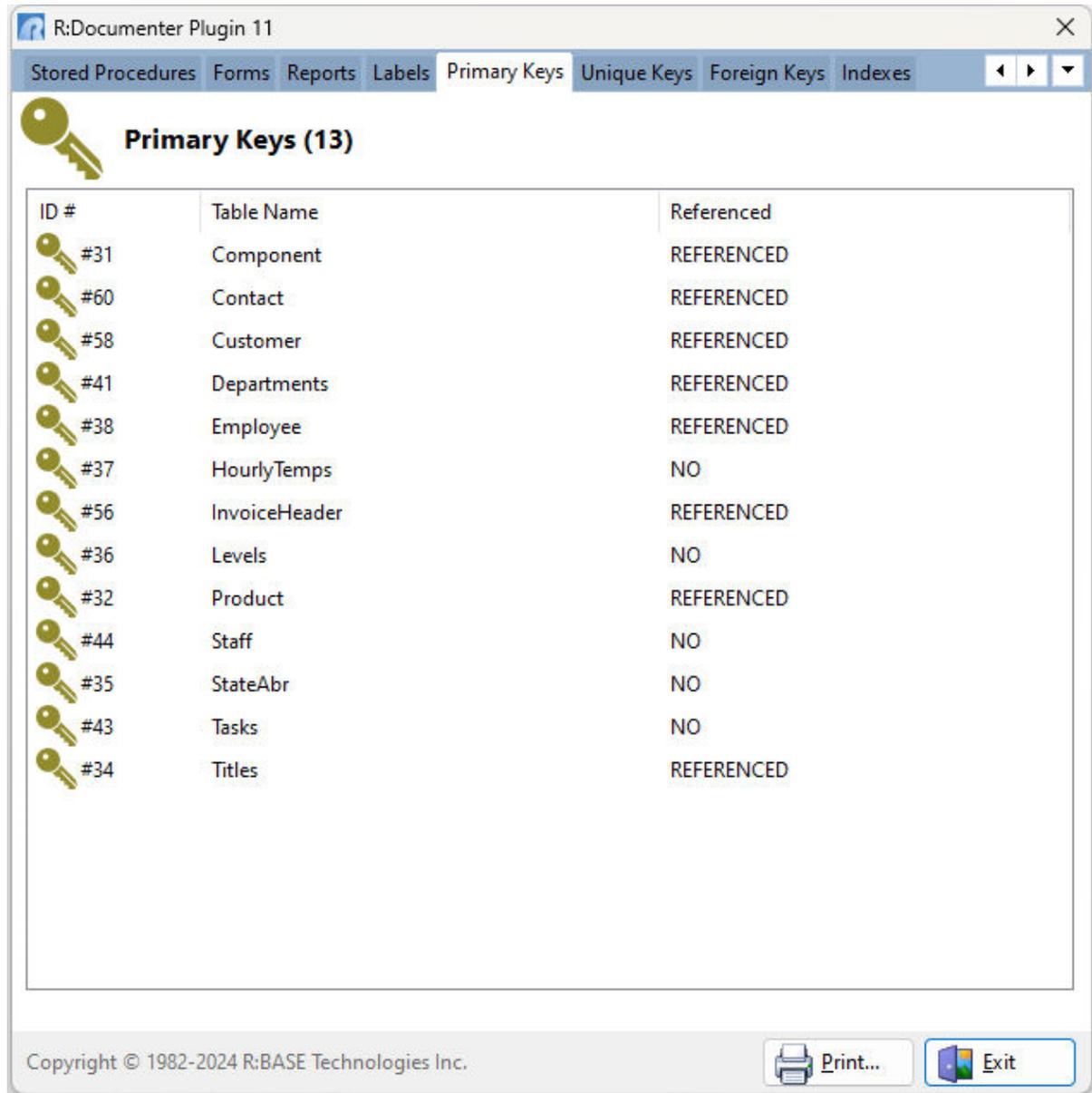
Variable Name	Variable Type	Variable Expression	Section
vCSZ	TEXT	(CustCity+', '&CustState&CustZip)	D

Label Controls(12):

Control Class	Description	Compone...	EEPs
Report	Table: 'Customer'		No
Column Header Band	Height: 0		No
Detail Band	Height: 76200		No
Shape	Left: 7673, Top: 265, Width: 88900...		No
DB Text	Table: 'Customer', Field: 'Compa...		No

4.11 Primary Keys

The "Primary Keys" tab will display the list of primary keys for the database along with the table the primary key is based upon and whether or not the primary key is referenced.



The screenshot shows the "Primary Keys (13)" tab in the R:Documenter Plugin 11 interface. The interface includes a menu bar with options: Stored Procedures, Forms, Reports, Labels, Primary Keys (selected), Unique Keys, Foreign Keys, and Indexes. Below the menu bar is a large key icon and the title "Primary Keys (13)". The main content area displays a table with three columns: ID #, Table Name, and Referenced. The table lists 13 primary keys, each with a key icon next to its ID number. The "Referenced" column indicates whether each primary key is referenced by other tables in the database.

ID #	Table Name	Referenced
#31	Component	REFERENCED
#60	Contact	REFERENCED
#58	Customer	REFERENCED
#41	Departments	REFERENCED
#38	Employee	REFERENCED
#37	HourlyTemps	NO
#56	InvoiceHeader	REFERENCED
#36	Levels	NO
#32	Product	REFERENCED
#44	Staff	NO
#35	StateAbr	NO
#43	Tasks	NO
#34	Titles	REFERENCED

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Any primary key can be selected for information displaying the column the primary key is assigned, the minimum and maximum table values in the table, the custom messages for the key, and foreign references for the primary key.

Attached DBF Tables Stored Procedures Forms Reports Labels Primary Keys Foreign Keys



Primary Keys (13)

Primary Key #39

[← Back to Key List](#)

Primary Key Column:

#	Column Name	PK Min Value	PK Max Value
1	CustID	101	130

Custom Messages

On attempt to duplicate PK column(s)

The customer id number must be unique for this table.

On attempt to delete PK row referenced by another table:

This customer id number is being referenced in another table

On attempt to change PK value referenced by another table:

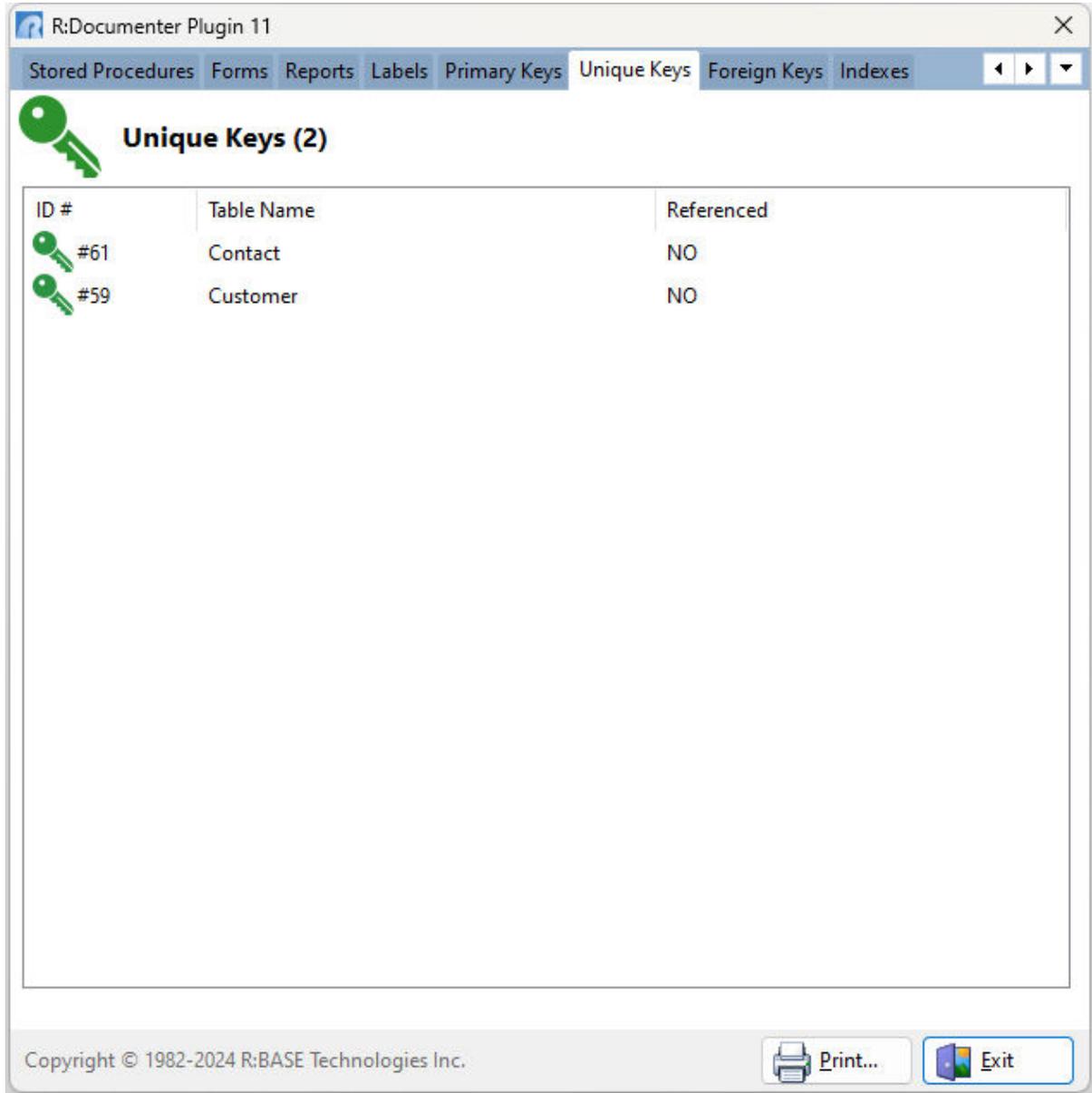
This value is being reference in another table.

The PK is referenced by the following Foreign Key:

FK Table Name	FK Column Name	Constraint Name
Contact	CustID	#54

4.12 Unique Keys

The "Unique Keys" tab will display the list of unique keys for the database along with the table the unique key is based upon and whether or not the unique key is referenced.



The screenshot shows the "Unique Keys (2)" tab in the R:Documenter Plugin 11 interface. The window title is "R:Documenter Plugin 11". The navigation bar includes "Stored Procedures", "Forms", "Reports", "Labels", "Primary Keys", "Unique Keys", "Foreign Keys", and "Indexes". The "Unique Keys" tab is active, displaying a table with the following data:

ID #	Table Name	Referenced
 #61	Contact	NO
 #59	Customer	NO

At the bottom of the window, there is a copyright notice: "Copyright © 1982-2024 R:BASE Technologies Inc." and two buttons: "Print..." and "Exit".

Any unique key can be selected for information displaying the column the unique key is assigned, the minimum and maximum table values in the table and the custom messages for the key.

Stored Procedures Forms Reports Labels Primary Keys **Unique Keys** Foreign Keys Indexes



Unique Keys (2)

Unique Key #61

[← Back to Key List](#)

Unique Key Column:

#	Column Name	UK Min Value	UK Max Value
1	ContPhone	206-123-4567	828-678-9876

Custom Messages

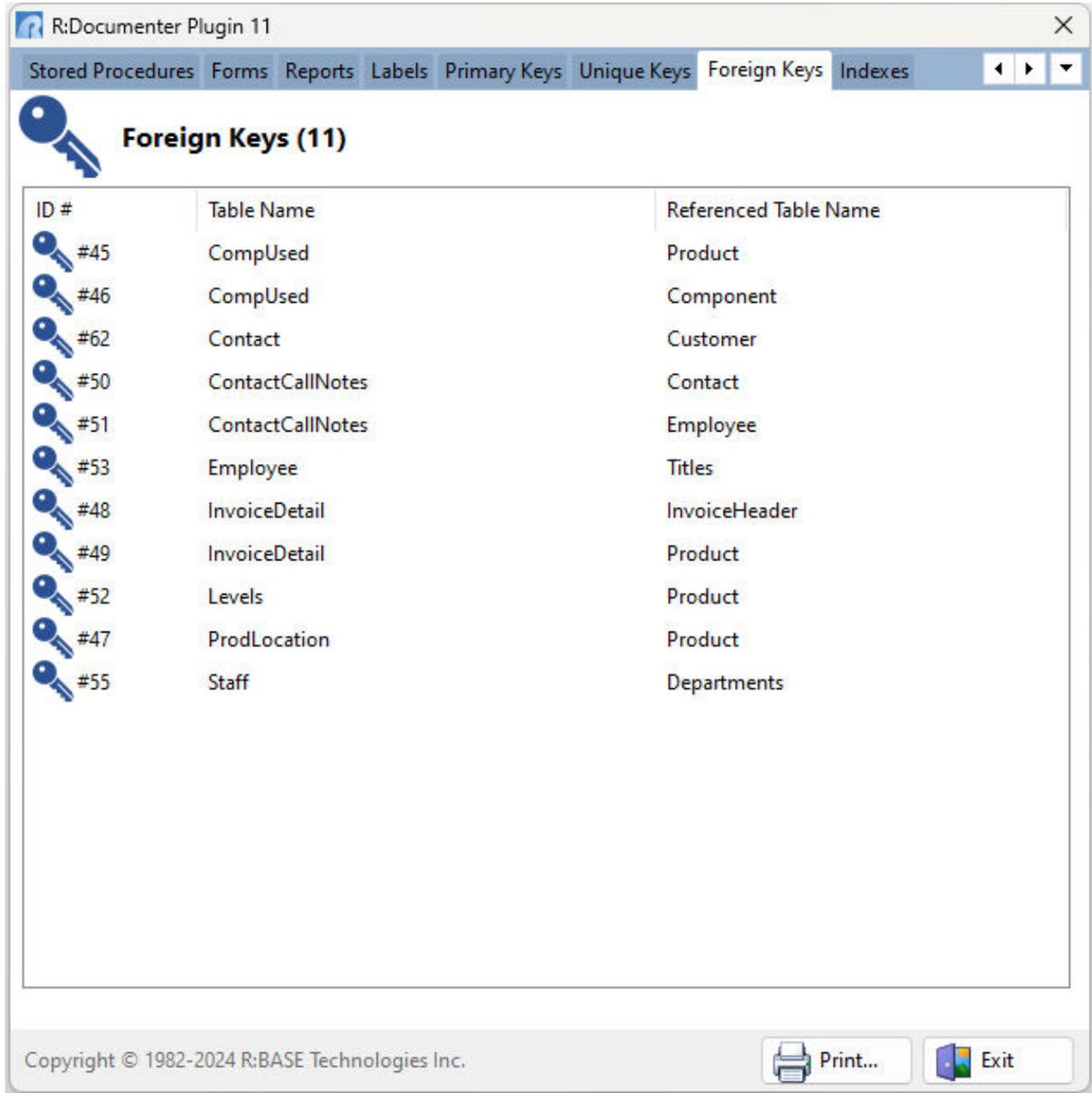
On attempt to duplicate UK column(s)
Values for rows in Contact must be unique
On attempt to delete UK row referenced by another table:
Cannot delete - values exist in another table
On attempt to change UK value referenced by another table:
Cannot update - values exist in another table

The UK is referenced by the following Foreign Key:

FK Table Name	FK Column Name	Constraint Name
---------------	----------------	-----------------

4.13 Foreign Keys

The "Foreign Keys" tab will display the list of foreign keys for the database along with the table the foreign key is based upon and the table name the key references.



The screenshot shows the "Foreign Keys (11)" tab in the R:Documenter Plugin 11 interface. The window title is "R:Documenter Plugin 11" and the tab bar includes "Stored Procedures", "Forms", "Reports", "Labels", "Primary Keys", "Unique Keys", "Foreign Keys", and "Indexes". The "Foreign Keys" tab is active, displaying a list of 11 foreign keys. Each entry includes an ID number, a key icon, the table name, and the referenced table name. At the bottom of the window, there is a copyright notice "Copyright © 1982-2024 R:BASE Technologies Inc." and two buttons: "Print..." and "Exit".

ID #	Table Name	Referenced Table Name
#45	CompUsed	Product
#46	CompUsed	Component
#62	Contact	Customer
#50	ContactCallNotes	Contact
#51	ContactCallNotes	Employee
#53	Employee	Titles
#48	InvoiceDetail	InvoiceHeader
#49	InvoiceDetail	Product
#52	Levels	Product
#47	ProdLocation	Product
#55	Staff	Departments

Any foreign key can be selected for information displaying the column and table the key references with the direction, as well as the custom messages for the key.

Stored Procedures Forms Reports Labels Primary Keys Foreign Keys Indexes Triggers



Foreign Keys (11)

Foreign Key #54

[← Back to Key List](#)

Foreign Key Column:

#	Column Name	Referenced Table	Direction
1	CustID	Customer	ASC

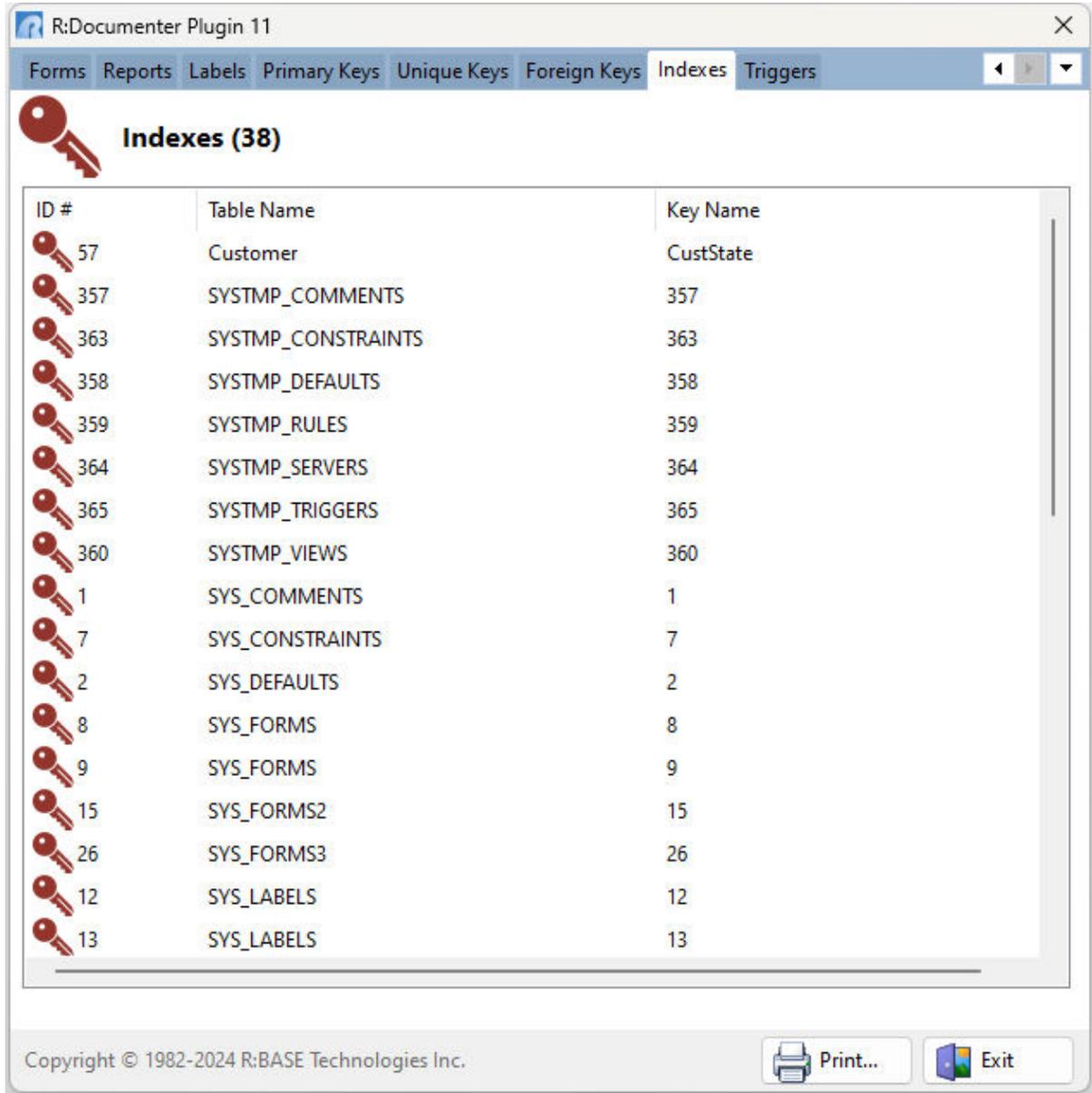
Custom Messages

Message on insert of a FK value not in the referenced table:

Message on update of a FK value to one not in the referenced table:

4.14 Indexes

The "Indexes" tab will display the list of indexes for the database along with the ID#, the table index is based upon and index name.



The screenshot shows the 'Indexes' tab in the R:Documenter Plugin 11 interface. The window title is 'R:Documenter Plugin 11'. The navigation bar includes 'Forms', 'Reports', 'Labels', 'Primary Keys', 'Unique Keys', 'Foreign Keys', 'Indexes', and 'Triggers'. The 'Indexes' tab is selected, displaying a list of 38 indexes. The list is titled 'Indexes (38)' and features a red key icon. The data is presented in a table with three columns: 'ID #', 'Table Name', and 'Key Name'. Each row includes a small red key icon to the left of the ID number.

ID #	Table Name	Key Name
57	Customer	CustState
357	SYSTMP_COMMENTS	357
363	SYSTMP_CONSTRAINTS	363
358	SYSTMP_DEFAULTS	358
359	SYSTMP_RULES	359
364	SYSTMP_SERVERS	364
365	SYSTMP_TRIGGERS	365
360	SYSTMP_VIEWS	360
1	SYS_COMMENTS	1
7	SYS_CONSTRAINTS	7
2	SYS_DEFAULTS	2
8	SYS_FORMS	8
9	SYS_FORMS	9
15	SYS_FORMS2	15
26	SYS_FORMS3	26
12	SYS_LABELS	12
13	SYS_LABELS	13

At the bottom of the window, there is a copyright notice: 'Copyright © 1982-2024 R:BASE Technologies Inc.' and two buttons: 'Print...' and 'Exit'.

Any index can be selected for information displaying the column that the index is assigned upon, the direction, unique setting, NULL value, length, direction, duplicate factor and adjacency factor.

Stored Procedures Forms Reports Labels Primary Keys Foreign Keys **Indexes** Triggers



Indexes (31)

Index CustState

[← Back to Key List](#)

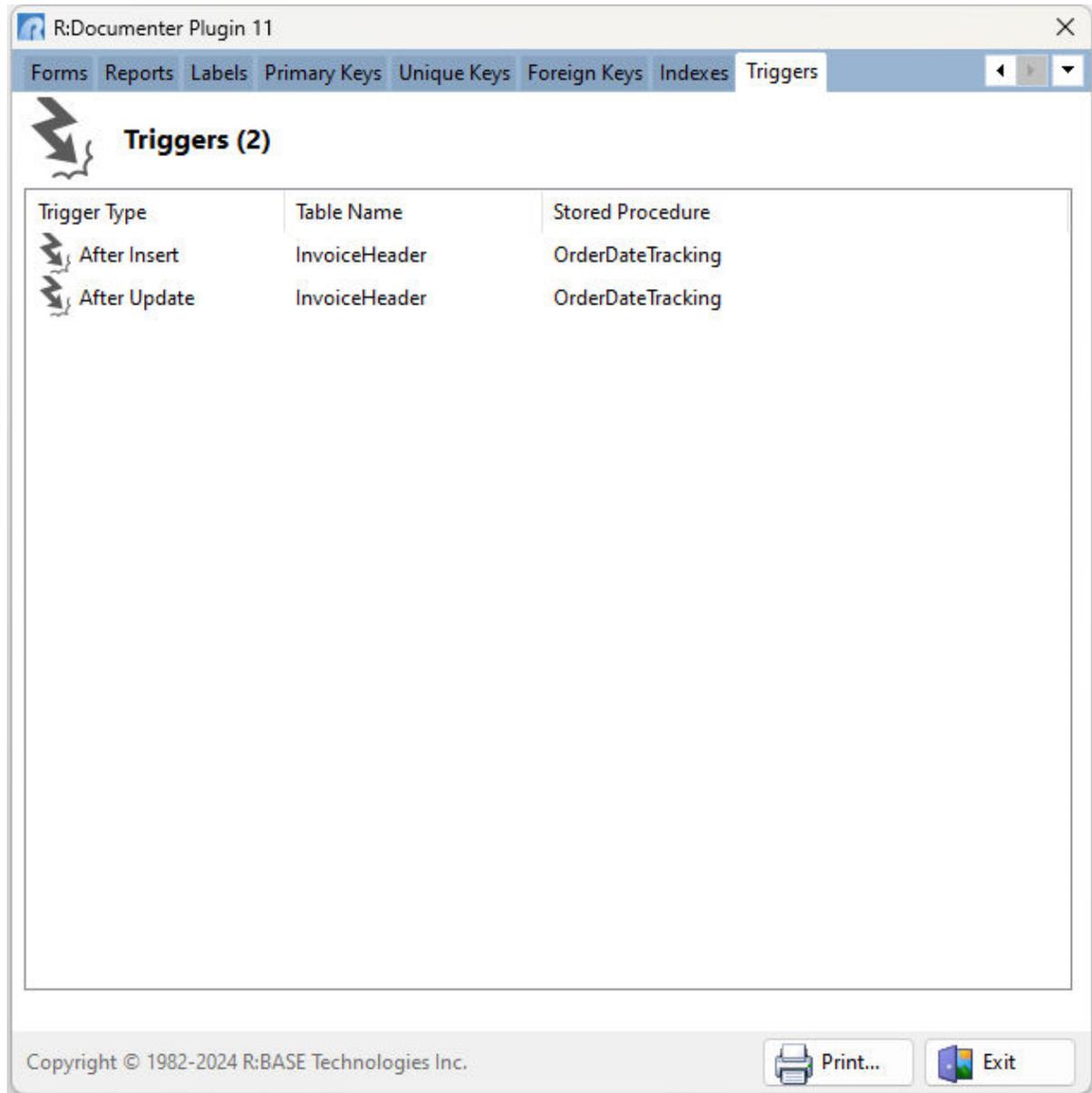
Index Columns :

#	Column Name	Direction
1	CustState	ASC

Unique	<input type="checkbox"/>	NULLs allowed	<input type="checkbox"/>
Key Length:	255		
Direction:	ASC		
Dup:	2.142857		
Adj:	1		

4.15 Triggers

The "Triggers" tab will display the list of triggers for the database along with the trigger type, the table the trigger is based upon and stored procedure it uses.



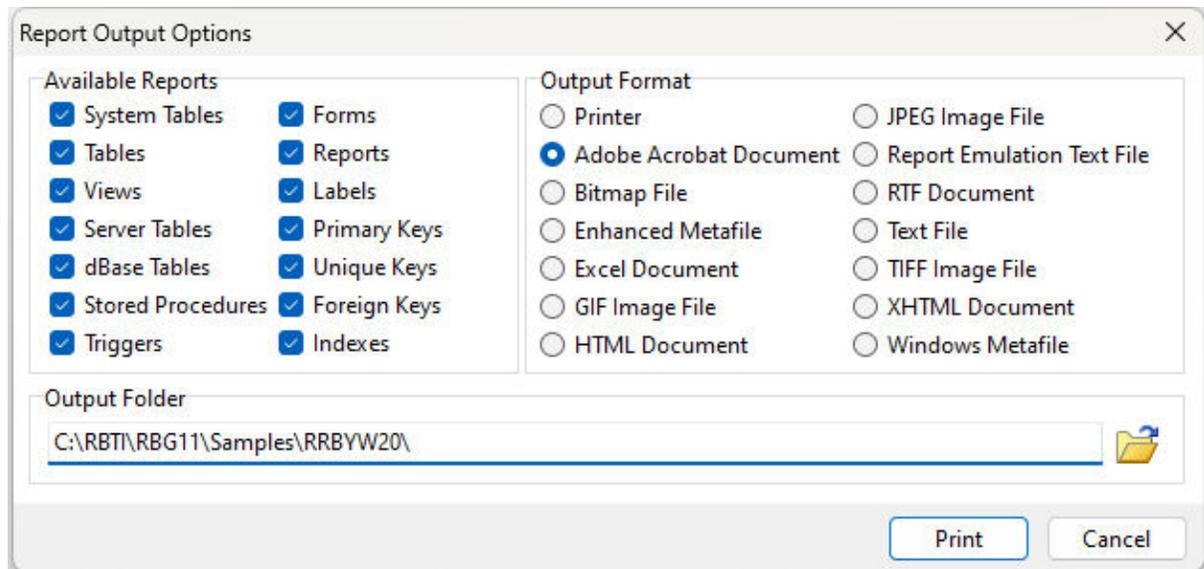
The screenshot shows the "Triggers" tab in the R:Documenter Plugin 11 interface. The window title is "R:Documenter Plugin 11". The tab bar includes "Forms", "Reports", "Labels", "Primary Keys", "Unique Keys", "Foreign Keys", "Indexes", and "Triggers". The main area is titled "Triggers (2)" and contains a table with the following data:

Trigger Type	Table Name	Stored Procedure
After Insert	InvoiceHeader	OrderDateTracking
After Update	InvoiceHeader	OrderDateTracking

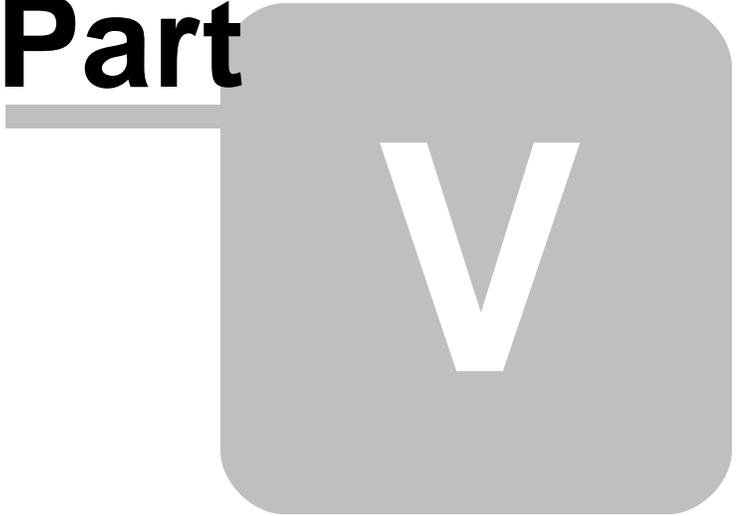
At the bottom of the window, there is a copyright notice: "Copyright © 1982-2024 R:BASE Technologies Inc." and two buttons: "Print..." and "Exit".

4.16 Print Report Output

R:Documenter will create a separate report for each portion of the database with 14 different output options. An option is also available to change the output folder.



Part



5 Examples

5.1 Example 01

-- connects to a password protected database, shows progress dialogs, hides main form,
-- files saved to C:\Temp, output format is PDF, printed reports are Forms, Reports, and Tables

```
PLUGIN RDOCUMENTER vDocResult +
|DBNAME CONTRCT IDENTIFIED BY OWNERNAME PASSWORD+
|PROGRESS ON+
|GUI OFF+
|DESTINATION C:\TEMP+
|FORMAT PDF+
|OBJECT FORM,REPORT,TABLE
```

5.2 Example 02

-- hides progress dialogs, shows main form, files saved to current folder, output format is PDF, print all
report types

```
PLUGIN RDOCUMENTER vDocResult|PROGRESS OFF
```

5.3 Example 03

-- Creates Full Database Schema Documentation
-- Plugins Used: RDocumenter11.rbm, RPDFMerge11.rbm

```
DISCONNECT
CONNECT RRBYW20 IDENTIFIED BY NONE
PAUSE 2 USING 'Choose the PDF format for the report output.' +
CAPTION 'IMPORTANT!' ICON INFO BUTTON 'OK' OPTION +
MESSAGE_FONT_NAME Tahoma +
|MESSAGE_FONT_COLOR 0 +
|MESSAGE_FONT_SIZE 10 +
|MESSAGE_FONT_BOLD ON

PLUGIN RDocumenter v1
--- In the R:Documenter window, choose
-- PDF format for report output

PLUGIN RPDFMerge 'vResult +
|ACTION MERGE +
|DOC_LIST_FILE PDFFilesToMerge.LST +
|OUTPUT_FILE RRBYW20_TOTAL_SCHEMA.pdf +
|OPEN_AFTER_SAVE ON +
|AUTHOR Technical Services Division of R:BASE Technologies +
|TITLE RRBYW20 Schema Documentation +
|SUBJECT Schema Documentation +
|KEYWORDS R:BASE, R:Documenter, R:PDFMerge, PLUGIN +
|CREATOR R:BASE Technologies, Inc.'

SET ERROR MESSAGE 2077 OFF
DELETE RRBYW20_SYS_TABLES.pdf
```

```
DELETE RRBYW20_TABLES.pdf
DELETE RRBYW20_VIEWS.pdf
DELETE RRBYW20_SVR_TABLES.pdf
DELETE RRBYW20_DBASE_TABLES.pdf
DELETE RRBYW20_PROCEDURES.pdf
DELETE RRBYW20_FORMS.pdf
DELETE RRBYW20_REPORTS.pdf
DELETE RRBYW20_LABELS.pdf
DELETE RRBYW20_PRIMARY_KEYS.pdf
DELETE RRBYW20_UNIQUE_KEYS.pdf
DELETE RRBYW20_FOREIGN_KEYS.pdf
DELETE RRBYW20_INDEXES.pdf
DELETE RRBYW20_TRIGGERS.pdf
SET ERROR MESSAGE 2077 ON
RETURN
```

--The following is the PDFFilesToMerge.LST contents

```
RRBYW20_SYS_TABLES.pdf
RRBYW20_TABLES.pdf
RRBYW20_VIEWS.pdf
RRBYW20_SVR_TABLES.pdf
RRBYW20_DBASE_TABLES.pdf
RRBYW20_PROCEDURES.pdf
RRBYW20_FORMS.pdf
RRBYW20_REPORTS.pdf
RRBYW20_LABELS.pdf
RRBYW20_PRIMARY_KEYS.pdf
RRBYW20_UNIQUE_KEYS.pdf
RRBYW20_FOREIGN_KEYS.pdf
RRBYW20_INDEXES.pdf
RRBYW20_TRIGGERS.pdf
```

Part



6 Technical Support

Please read over the help documentation at least once before seeking support. We have worked very hard to make the help documentation clear and useful, but concise. It is suggested that you reread these instructions once you have become accustomed to using the software, as new uses will become apparent.

If you have further questions, and cannot find the answers in the documentation, you can obtain information from the below sources:

- Email our Technical Support Staff at: support@rbase.com
- Access the R:BASE Technologies Support home page online at <https://www.rbase.com/support>

You may be required to purchase a technical support plan. Several support plans are available to suit the needs of all users. [Available Technical Support Plans](#)

Please be prepared to provide the following:

- The product registration number, which is located on the invoice/order slip for the purchased product
- The type of operating system and hardware in use
- Details regarding your operating environment; such as available memory, disk space, your version of R:BASE, local area network, special drivers, related database structures, application files, and other files that are used or accessed by your application

All provide information will be used to better assist you.

R:BASE Technologies has a number of different services available for R:BASE products. As a registered user, you will receive information about new features for R:BASE and other R:BASE Technologies products. Please remember to register your software. <https://www.rbase.com/register/>

Part



7 Useful Resources

- . R:BASE Home Page: <https://www.rbase.com>
- . Up-to-Date R:BASE Updates: <https://www.rbaseupdates.com>
- . Current Product Details and Documentation: <https://www.rbase.com/rbg11>
- . Support Home Page: <https://www.rbase.com/support>
- . Product Registration: <https://www.rbase.com/register>
- . Official R:BASE Facebook Page: <https://www.facebook.com/rbase>
- . Sample Applications: <https://www.razzak.com/sampleapplications>
- . Technical Documents (From the Edge): <https://www.razzak.com/fte>
- . Education and Training: <https://www.rbase.com/training>
- . Product News: <https://www.rbase.com/news>
- . Upcoming Events: <https://www.rbase.com/events>
- . R:BASE Online Help Manual: <https://www.rbase.com/support/rsyntax>
- . Form Properties Documentation: <https://www.rbase.com/support/FormProperties.pdf>
- . R:BASE Beginners Tutorial: <https://www.rbase.com/support/rtutorial>
- . R:BASE Solutions (Vertical Market Applications): <https://www.rbase.com/products/rbasesolutions>

Part



8 Feedback

Suggestions and Enhancement Requests:

From time to time, everyone comes up with an idea for something they'd like a software product to do differently.

If you come across an idea that you think might make a nice enhancement, your input is always welcome.

Please submit your suggestion and/or enhancement request to the R:BASE Developers' Corner Crew (R:DCC) and describe what you think might make an ideal enhancement. In R:BASE, the R:DCC Client is fully integrated to communicate with the R:BASE development team. From the main menu bar, choose "Help" > "R:DCC Client". If you do not have a login profile, select "New User" to create one.

If you have a sample you wish to provide, have the files prepared within a zip archive prior to initiating the request. You will be prompted to upload any attachments during the submission process.

Unless additional information is needed, you will not receive a direct response. You can periodically check the status of your submitted enhancement request.

If you are experiencing any difficulties with the R:DCC Client, please send an e-mail to rdcc@rbase.com.

Reporting Bugs:

If you experience something you think might be a bug, please report it to the R:BASE Developers' Corner Crew. In R:BASE, the R:DCC Client is fully integrated to communicate with the R:BASE development team. From the main menu bar, choose "Help" > "R:DCC Client". If you do not have a login profile, select "New User" to create one.

You will need to describe:

- What you did, what happened, and what you expected to happen
- The product version and build
- Any error message displayed
- The operating system in use
- Anything else you think might be relevant

If you have a sample you wish to provide, have the files prepared within a zip archive prior to initiating the bug report. You will be prompted to upload any attachments during the submission process.

Unless additional information is needed, you will not receive a direct response. You can periodically check the status of your submitted bug.

If you are experiencing any difficulties with the R:DCC Client, please send an e-mail to rdcc@rbase.com.

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