



IBM Software Group

Rational Developer for IBM i (RDi) Screen Designer Technology Preview

Featuring: GUI screen designer to edit DDS source for 5250 Display Files

Rational software

Last Update: 11/25/2009

© 2009 IBM Corporation

Rational Developer for System i



Agenda

- **Remote System Explorer (RSE) Screen Design Editor**
 - **Screen Design editor basics**
 - Creating a screen, adding controls
 - Working with the Properties view
 - Creating a subfile

2

© 2008 IBM Corporation

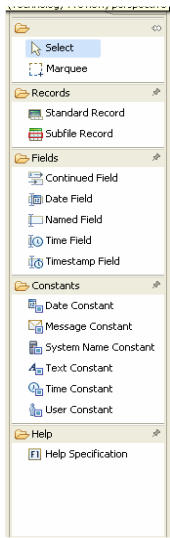
Rational Developer for System i

Screen Designer: What it is

- Eclipse based DDS Display File designer for layout of terminal screens
- Follow-on to Code/400 Designer
- Screen designing joins the rest of the RDi based tooling
- Launchable from Remote Systems Explorer
- Fully integrated with the Lpex DDS editor and RDi views
- Technical Preview for V7.5

Screen Designer: Why we did it

- Continued support of our existing customer applications
- Continued investment in terminal application development
- Migration path from SDA and Code/400 for display files
- Update to the latest RDi technologies, Java / Eclipse / RSE

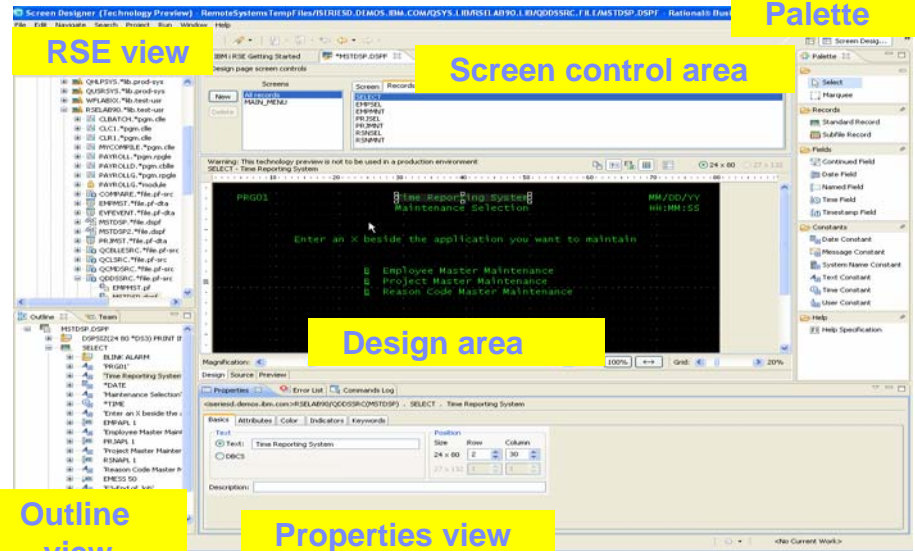


3

© 2008 IBM Corporation

Rational Developer for System i

Screen designer perspective



RSE view

Screen control area

Design area

Outline view

Properties view

Palette

© 2008 IBM Corporation

Rational Developer for System i

Starting Screen Designer

- In RSE view
 - Right click DSPF member type
 - Two choices under **Open with** action
 - Default LPEX source editor
 - Screen Designer

For working with Screen Designer
Switch to the Screen Designer perspective

5

© 2008 IBM Corporation

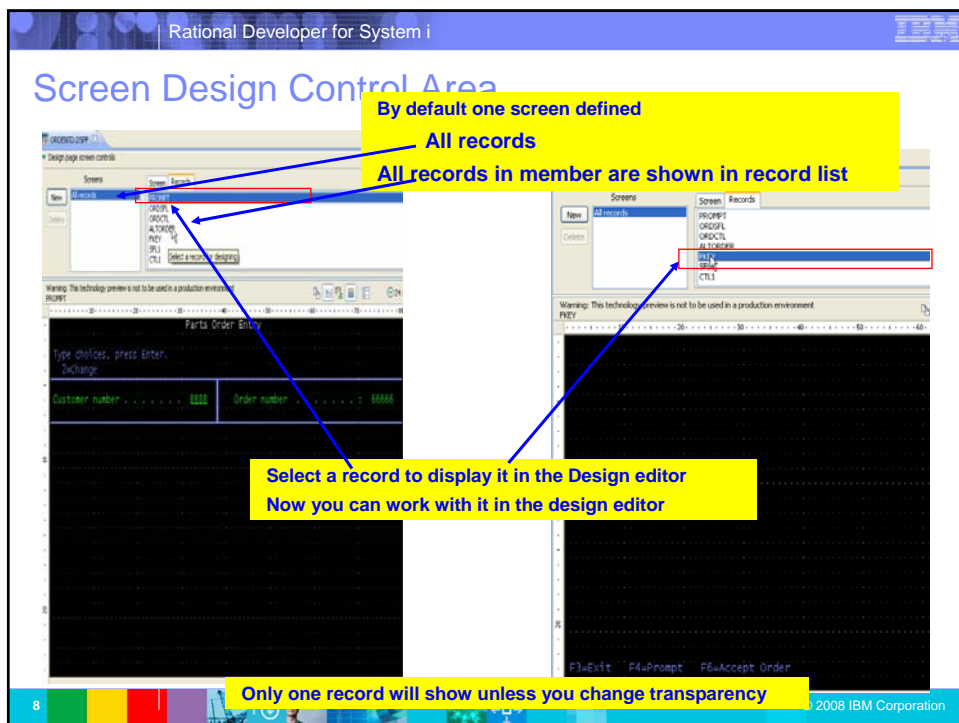
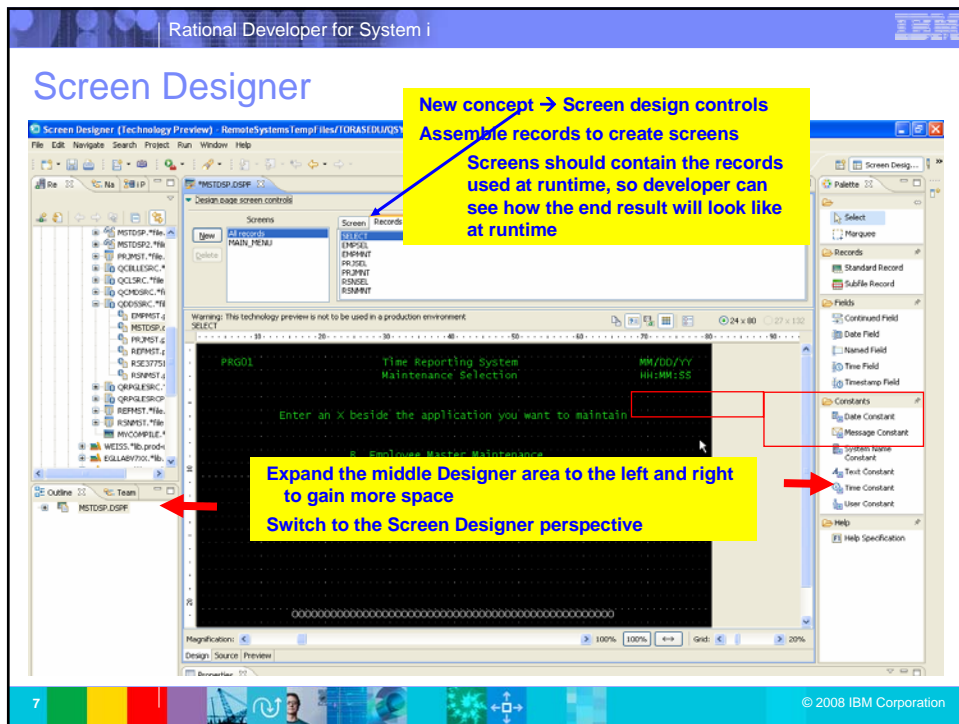
Rational Developer for System i

Agenda

- Remote System Explorer (RSE) Screen Design Editor
 - Screen Design editor basics
 - Creating a screen, adding controls
 - Working with the Properties view
 - Creating a subfile

6

© 2008 IBM Corporation



Rational Developer for System i

Screen Design Control Area

Change transparency setting to show all records in screen

Warning: This technology preview is not to be used in a production environment.

Not a workable solution for all records

You need to be able to select the records that get displayed together at runtime to show a true layout of the screens

9

© 2008 IBM Corporation

Rational Developer for System i

Create a new screen

Create screen for prompt display
In your code this screen is made up of 2 records
Add these 2 records to the new screen

Select a record for design or for removal from the

10

© 2008 IBM Corporation

Rational Developer for System i

Screen Design Control Area

Select the screen
The design editor will show both records
Select one record to work with in the editor

Warning: This technology preview is not to be used in a production environment.

PROMPT

Parts Order Entry

Type choices, press Enter.
2=Change

Customer number BBBB Order number 66666

Selected record is highlighted in the editor
Non-selected records are dimmed
You can only work with the selected record in the editor

F3=Exit F4=Prompt F6=Accept Order

11

© 2008 IBM Corporation

Rational Developer for System i

Screen Design Control Area

Screen information is stored in DDS source
Comment lines are added to the source

Warning: This technology preview is not to be used in a production environment.

PROMPT

Parts Order Entry

Type choices, press Enter.
2=Change

Customer number BBBB Order number 66666

Screen information is stored in DDS source
Comment lines are added to the source

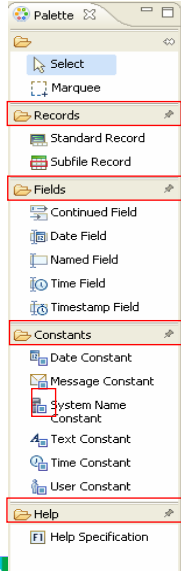
```
011122    A**RS+<record-sequences>
011123    A**RS+ <sequence name="prompt screen">
011124    A**RS+ <record-write record-format="PROMPT" />
011125    A**RS+ <record-write record-format="FKEY" />
011126    A**RS+ </sequence>
011127    A**RS </record-sequences>
```

12

© 2008 IBM Corporation

Rational Developer for System i

The Screen Designer Palette



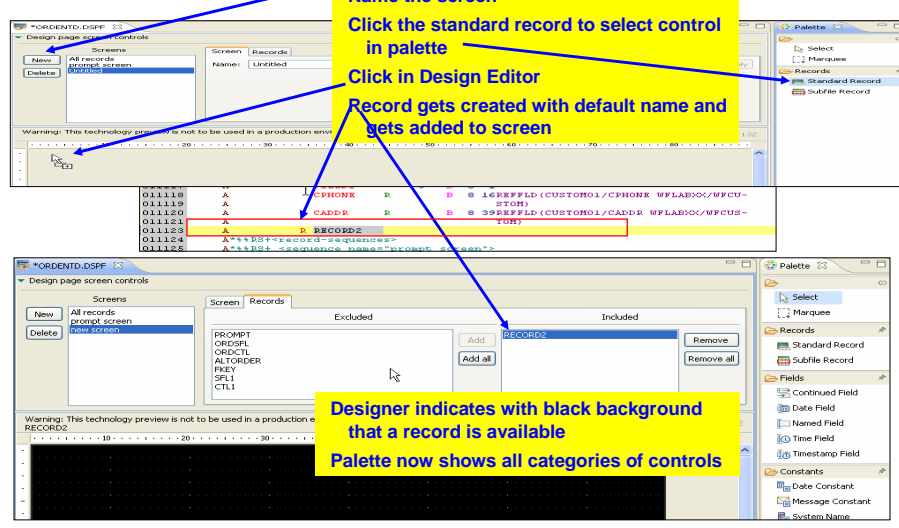
All DDS controls are available on the palette view
Divided into 4 main categories

- Records
 - Standard record
 - Subfile record
- Fields
 - Continued
 - Date
 - Named
 - Time
 - Timestamp
- Constants
 - Date
 - Message
 - System Name
 - Text
 - Time
 - User
- Help
 - Help specification

13 © 2008 IBM Corporation

Rational Developer for System i

Build a new screen



Click new button
Name the screen
Click the standard record to select control in palette
Click in Design Editor
Record gets created with default name and gets added to screen

Designer indicates with black background that a record is available
Palette now shows all categories of controls

14 © 2008 IBM Corporation

Rational Developer for System i

Add controls

Warning: This technology preview is not to be used in a production environment
RECORD2

Named Field
Time Field
Timestamp Field
Constants
Date Constant
Message Constant
System Name Constant
Text Constant
Time Constant
User Constant

- ▶ Adding DDS controls is simple
- ▶ Click the control you need on the palette
- ▶ Move cursor over design editor
- ▶ Hover text will indicate location of cursor
- ▶ Click at target position
- ▶ Default control gets added to record

Warning: This technology preview is not to be used in a production environment
RECORD2 - Text constant

Warning: This technology preview is not to be used in a production environment
RECORD2 - Text constant

```

1  A      R RECORD2
  A      2 13 'Text constant'
```

▶ Designer and source are always synchronized

© 2008 IBM Corporation

Rational Developer for System i

Changing controls in design editor

Warning: This technology preview is not to be used in a production environment
RECORD2 - Text constant

Warning: This technology preview is not to be used in a production environment
RECORD2 - Text constant

- ▶ Select constant control in designer
- ▶ Type text you need
- ▶ Control expands in length as you type

Warning: This technology preview is not to be used in a production environment
RECORD2 - Heading for this screen

Warning: This technology preview is not to be used in a production environment
RECORD2 - Heading for this screen

- ▶ Need different length
- ▶ Grab the edge and drag

- ▶ Don't like the location
- ▶ Just drag and drop to new location

© 2008 IBM Corporation

Rational Developer for System i

Agenda

- Remote System Explorer (RSE) Screen Design Editor
 - Screen Design editor basics
 - Creating a screen, adding controls
 - Working with the Properties view**
 - Creating a subfile

17 © 2008 IBM Corporation

Rational Developer for System i

Using the properties view

The first screenshot shows the Properties view for a screen control. The Properties view is open, showing the 'Text' tab. The 'Text' property is set to 'Heading for this screen'. The 'Position' tab is also visible, showing the control's size (24 x 80), row (3), and column (27).

The second screenshot shows the Properties view for a field control. The Properties view is open, showing the 'Field' tab. The 'Field' property is set to 'FIELD'. The 'Position' tab is also visible, showing the control's size (24 x 80), row (5), and column (14).

- Properties view shows properties for selected control
- Select control in design editor or Outline view
- Properties view changes with control type
- Field properties are different from constant properties

18 © 2008 IBM Corporation

Rational Developer for System i

Property pages

- Basic page contains info like
 - Name
 - Position on screen
 - Length
 - Usage
 - Type
 - etc
- Attributes page contains
 - List of valid DDS attributes
 - List of attributes applied to the control
 - Add/remove attributes used for control with buttons

19

Rational Developer for System i

Property pages

- Color page contains:
 - Color to apply
- Indicator page contains:
 - Indicator to specify
- Keyword page contains
 - List of valid DDS keywords for selected control
 - Add/remove keywords using push buttons

20

Rational Developer for System i

Property pages for referenced fields

Basic page contains info like

- ▶ Name
- ▶ Location
- ▶ Override info

Reference page contains

- ▶ Reference info
- ▶ Browse button to get info from reference files

21

© 2008 IBM Corporation

Rational Developer for System i

Design tab and source tab

Change between

- ▶ Design editor
- ▶ Source editor

Click on the tab to switch

Make changes in one of them

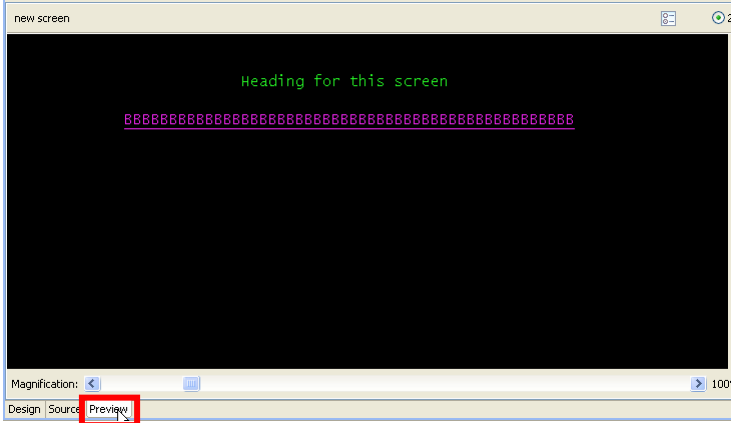
Change will be reflected in the other editor

22

© 2008 IBM Corporation

Rational Developer for System i

Preview screen



new screen

Heading for this screen

Magnification: 100%

Design Source **Preview**

► Some functionality still missing

► Applying Indicator sets

23

© 2008 IBM Corporation

Rational Developer for System i

Agenda

- **Remote System Explorer (RSE) Screen Design Editor**
 - Screen Design editor basics
 - Creating a screen, adding controls
 - Working with the Properties view
 - **Creating a subfile**

24

© 2008 IBM Corporation

Rational Developer for System i

How about subfiles ?

Warning: This technology preview is not to be used in a production environment.

- ▶ Select subfile record on palette view
- ▶ Click on Design editor to create the subfile records

Warning: This technology preview is not to be used in a production environment.

- ▶ Subfile record and subfile control record created

25

Rational Developer for System i

Subfile record

Warning: This technology preview is not to be used in a production environment.

- ▶ Add controls from palette to subfile record
- ▶ Subfile page size and subfile size can be changed in properties view
- ▶ Default is 6

Warning: This technology preview is not to be used in a production environment.

Subfile name: SFL2

Number of entries (SFLSIZ)

Specific: 1 *DS4 1

Field:

Entries per displayed page (SFLPAG)

6 *DS4 1

Display

Subfile (SFLDSP) Indicators...

☒ Subfile control (SFLDSPCTL) Indicators...

Spaces between records (SFLLIN)

1 *DS4 1

26

Corporation

Rational Developer for System i

Subfile control record

Warning: This technology preview is not to be used in a production environment.

Subfile name: SFL2

Number of entries (SFLSIZ): 10

Field: 1

Entries per displayed page (SFLPAQ): 10

Display: Subfile (SFLDSP)

Subfile control (SFLDSPCTL)

Spaces between records (SFLDSP)

Indicators...

Field	Length	Position	Indicator
R SFL2	9	5	7
FIELD	18	5	22
FIELD1	3	5	44
FIELD2	9	5	50
FIELD3			
R CTL2			
SFLCTL(SFL2)			
SFLDSPCTL			
SFLDSP			
SFLPAQ(10)			
SFLSIZ(11)			
3 7'Key'			
3 22'Name'			
3 44'Flag'			
3 50'Shipped'			

27

© 2008 IBM Corporation

Rational Developer for System i

Summary

Remote System Explorer (RSE) LPEX Editor

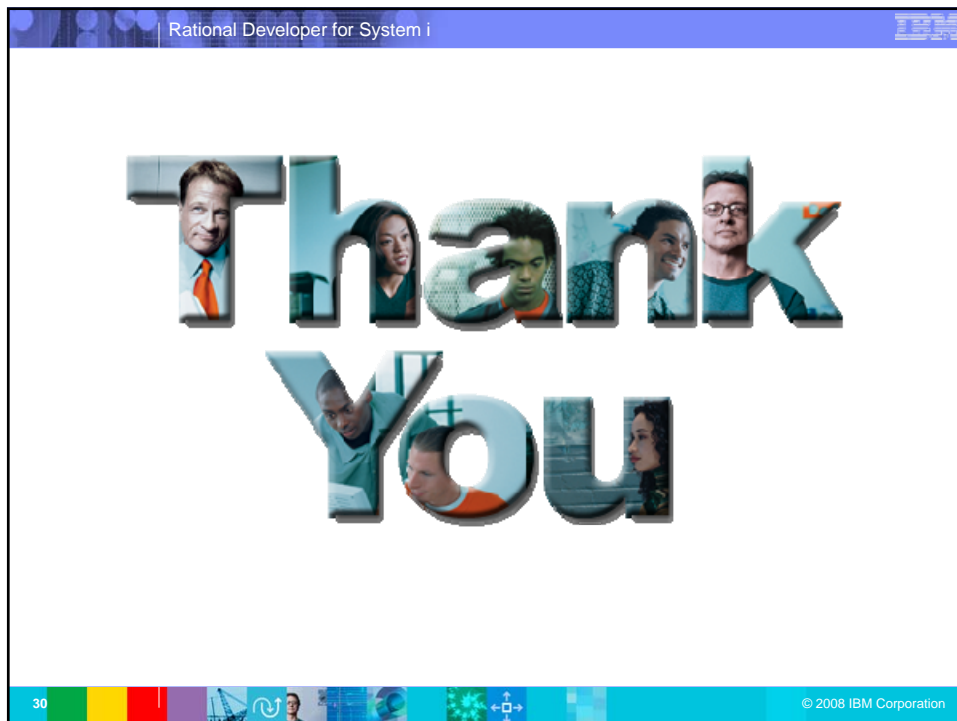
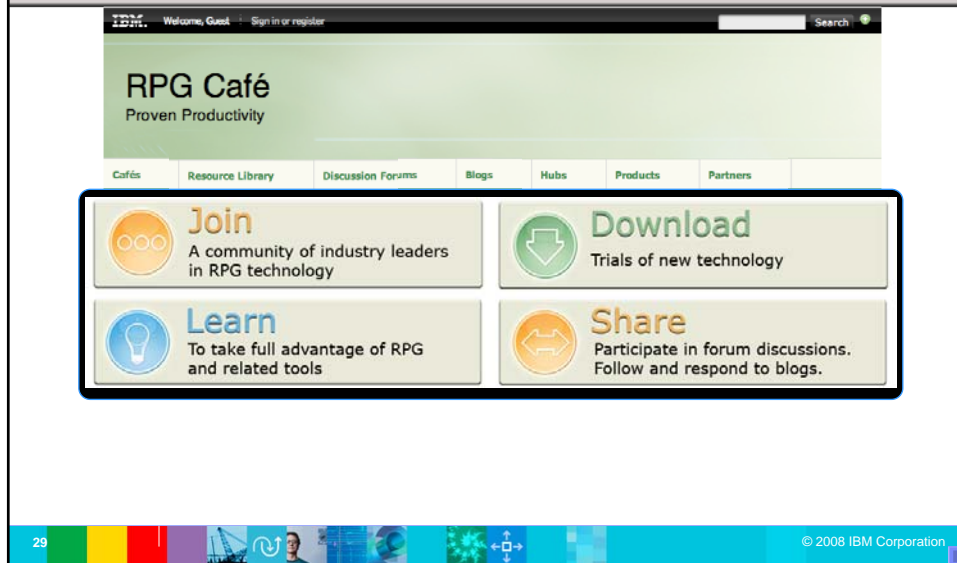
- Full functional screen design editor
- Switch between design editor and source editor
- Properties view handles DDS keywords
- Use outline view to navigate through your DDS source
- Use screens to assemble multiple records
- Create subfiles easily
- A great productivity aid for the seasoned or new DDS developer
- Lots of resources available to get you started:
 - RPG Café with RDi hub**
 - www.ibm.com/software/rational/cafe/community/rpg/rdi
 - midrange mailing list
 - <http://lists.midrange.com/mailman/listinfo/wdsci-l>
 - Webcasts and System i magazines
 - COMMON and IBM Power Technical Conferences
 - User group meetings

28

© 2008 IBM Corporation

The IBM Rational RPG Café

ibm.com/rational/cafe



Trademarks & Disclaimers

© IBM Corporation 1994-2008. All rights reserved.

References in this document to IBM products or services do not imply that IBM intends to make them available in every country.

The following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

AS/400	IBM (logo)	i5/OS
AS/400e	iSeries	
e (logo) business	OS/400	
IBM	System i	

Lotus, Freelance Graphics, and Word Pro are registered trademarks of Lotus Development Corporation and/or IBM Corporation.

Domino is a trademark of Lotus Development Corporation and/or IBM Corporation.

C-bus is a trademark of Corollary, Inc. in the United States, other countries, or both.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

ActionMedia, LANDesk, MMX, Pentium and ProShare are trademarks of Intel Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

SET and the SET Logo are trademarks owned by SET Secure Electronic Transaction LLC.

Other company, product and service names may be trademarks or service marks of others.

Information is provided "AS IS" without warranty of any kind.

All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics may vary by customer.

Information in this presentation concerning non-IBM products was obtained from a supplier of these products, published announcement material, or other publicly available sources and does not constitute an endorsement of such products by IBM. Sources for non-IBM list prices and performance numbers are taken from publicly available information, including vendor announcements and vendor worldwide homepages. IBM has not tested these products and cannot confirm the accuracy of performance, capability, or any other claims related to non-IBM products. Questions on the capability of non-IBM products should be addressed to the supplier of those products.

All statements regarding IBM future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. Contact your local IBM office or IBM authorized reseller for the full text of the specific Statement of Direction.

Some information in this presentation addresses anticipated future capabilities. Such information is not intended as a definitive statement of a commitment to specific levels of performance, function or delivery schedules with respect to any future products. Such commitments are only made in IBM product announcements. The information is presented here to communicate IBM's current investment and development activities as a good faith effort to help with our customers' future planning.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput or performance improvements equivalent to the ratios stated here.

Photographs shown are of engineering prototypes. Changes may be incorporated in production models.