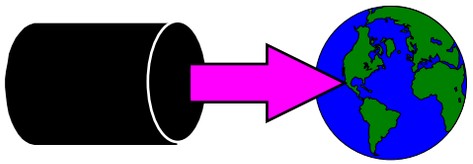
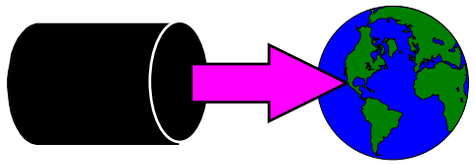
Inside Module 7

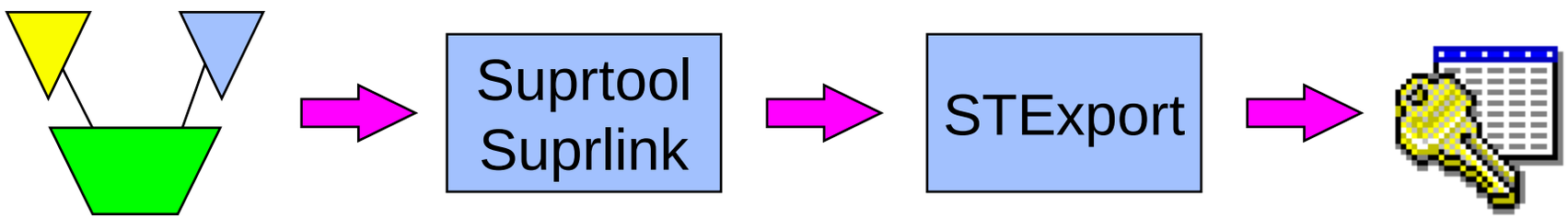


Exporting Data to the World

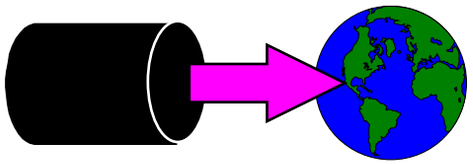
Exporting Data to other Applications



- Extract the data using Suprtool and Suprlink
- Convert the files using STExport
- Transfer the file to the PC
- Import the delimited file



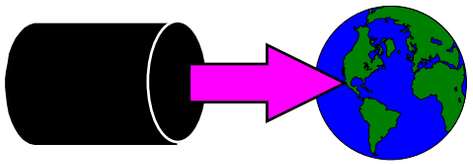
Data needs to be converted



- Image and Eloquence data has:
  - Fixed-width fields
  - Binary storage formats (J2, K2, P28, etc)
  - Structure defined in Root File.

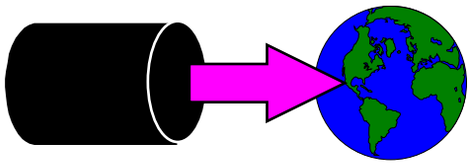
- PC Applications require:
  - Variable-length fields
  - ASCII values for numerics
  - Field delimiters
  - Field name declarations

STExport converts the data



- STExport reads self-describing files
- Outputs ASCII files
- Allows you to specify:
  - field delimiters to use
  - date format
  - fieldnames in first record
  - numeric format
  - fixed or variable length
  - quotes on character fields
  - HTML - *table* or *preformatted*
  - XML output

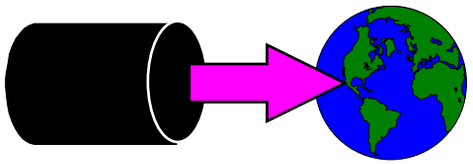
Ways to run STExport



- **On MPE**
  - From the MPE prompt
    ```
    :run stexport.pub.robelle
    ```
  - From Suprtool
    ```
    >export
    ```
  - From inside of Suprtool
    ```
    >export input custsd
    >export output custexp
    >export exit

    In=20. Out=20. CPU-Sec=1. Wall-Sec=1.
    ```
- **On HP-UX**
  ```
  /opt/robelle/bin/stexport
  ```

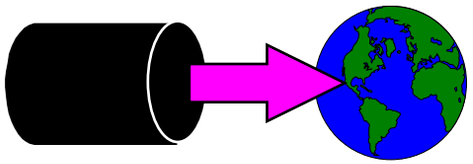
For example .....



```
>export
$in custsd
$out custexp
$xeq
In=19. Out=19. CPU-Sec=1. Wall-Sec=2.
$print custexp

"Vancouver",200000,10010,"20","Wayne","Humphreys","BC",.....
"Coquitlam",200000,10014,"20","Elizabeth","Welton","BC",.....
"Richmond",200000,10011,"20","William","Kirk","BC",.....
"Calgary",200000,10017,"20","Jack","Morrison","AL",.....
"Edmonton",200000,10015,"20","James","Young","AL",......
"Coquitlam",200000,10012,"20","Percy","Ferguson","BC",.....
"Surrey",200000,10020,"20","Walley","Nisbet","BC",.....
```

In Microsoft Excel



- Transfer to PC, File/Open in Microsoft Excel:

Microsoft Excel - CUSTEXP.CSV

File Edit View Insert Format Tools Data Window Help

100%

Arial 10 B I U $ % ,

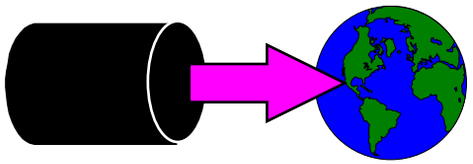
A1 Vancouver

	A	B	C	D	E	F	G
1	Vancouver	200000	10010	20	Wayne	Humphrey	BC
2	Coquitlam	200000	10014	20	Elizabeth	Welton	BC
3	Richmond	200000	10011	20	William	Kirk	BC
4	Calgary	200000	10017	20	Jack	Morrison	AL
5	Edmonton	200000	10015	20	James	Young	AL
6	Coquitlam	200000	10012	20	Percy	Ferguson	BC
7	Surrey	200000	10020	20	Walley	Nisbet	BC
8	Calgary	0	10006	40	Werner	Frahm	AL
9	Burnaby	200000	10002	20	Gordon	Lackner	BC
10	Vancouver	100000	10001	10	Darlene	Hamilton	BC

Sheet1

Ready NUM

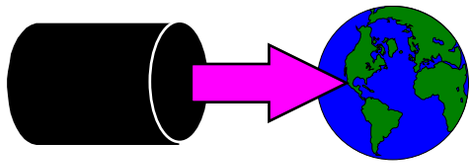
Dates and Decimals



- Use Suprtool's ITEM command to qualify the fields:

```
>get d-sales
>item deliv-date,date,YYYYMMDD
>item product-price,decimal,2
>out salesd,link
>x
IN=8, OUT=8. CPU-Sec=1. Wall-Sec=1.
>form salesd
File: SALESD.HANS.TRAINING     (SD Version B.00.00)
      Entry:                     Offset
         CUST-ACCOUNT          Z8      1
         DELIV-DATE            I2      9        <<YYYYMMDD>>
         PRODUCT-NO            Z8     13
         PRODUCT-PRICE         I2     21        << .2  >>
         PURCH-DATE            I2     25 ...etc
```

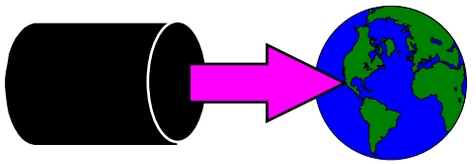
..... continued



- Specify date format in STEXPORT:

```
>export
$in salesd
$date DDMMYY "/"
$output *
$x
10020,04/10/97,50511501,98.31,19971000,2,2753,22415
10003,16/10/97,50511501,98.31,19971016,1,1376,11207
10003,16/10/97,50512501,145.62,19971016,1,2039,16600
10003,16/10/97,50513001,192.20,19971016,1,2691,21910
10016,20/10/97,50521001,24.59,19971020,3,1033,8411
10016,20/10/97,50532001,139.85,19971020,1,1958,15942
10020,28/10/97,50512501,146.60,19971028,1,2052,16713
10010,20/10/97,50533001,69.92,19971020,1,979,7970
In=8. Out=8. CPU-Sec=1. Wall-Sec=1.
```

Specifying field names

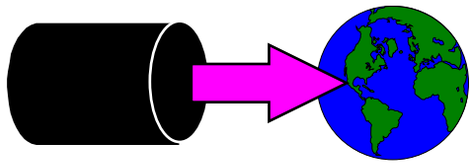


- Use HEADING command to add fieldnames in the first record:

```
$heading '"Description","Model"'
$heading add ',"Product Code"'
$output *
$xeq
   "Description","Model","Product Code"
   "Skil 3/8  Variable Speed Drill","#6523",50531501
   "B&D Router","#7613-04",50522001
   "Skil Var. Sp. Auto-Scroll Saw","#4560",50533001
   "Skil 8 1/2  Circular Saw","#5665",50532501
   .....etc.....
```

- HEADING FIELDNAMES uses Image field names.

Fixed-length output

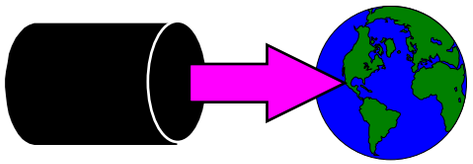


- Force fixed-length with COLUMNS command

```
$input prodsd
$columns fixed
$out *
$x
"Description","Model","Product Code"
"Skil 3/8  Variable Speed Drill","#6523"     , 50531501
"B&D Router"                    ,"#7613-04"  , 50522001
"Skil Var. Sp. Auto-Scroll Saw" ,"#4560"     , 50533001
"Skil 8 1/2  Circular Saw"      ,"#5665"     , 50532501
"B&D Cordless Screwdriver"      ,"#9018-04"  , 50521001
```

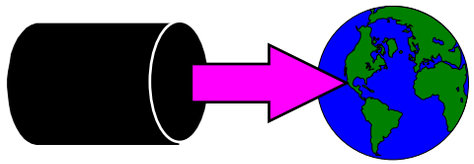
- Also see SPACES and ZERO commands

Preparing Data For The Web



- STExport can create HTML files
- Data can be formatted in a table
  - HTML TABLE command
- Or it can be formatted like a List Standard listing
  - HTML PREFORMATTED command
- Formatting is applied by STExport
  - Numeric data is right justified, with decimal points
  - Alpha data is left justified
  - Dates are formatted as you specify

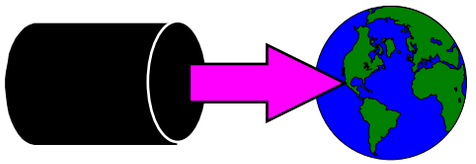
Preparing HTML Tables



- Use the HTML TABLE command

```
$input reptfile
$heading none
$heading column "Account #"
$heading column "Amount"
$heading column "Date"
$heading column "Product #"
$heading column "Last Name"
$heading column "First Name"
$html table title "Orders" heading "BC Sales over $100"
$output bcsales
$xeq
```

Table With Column Headings



- The table has one column per field, and one row per record

Orders - Microsoft Internet Explorer

File Edit View Go Favorites Help

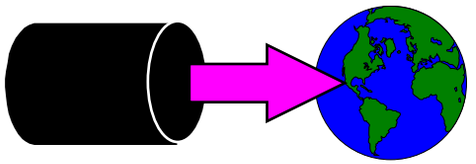
Address C:\TEMP\bcsales.html

BC Sales over $100

Account #	Amount	Date	Product #	Last Name	First Name
10003	112.07	19951016	50511501	Melander	John
10003	166.00	19951016	50512501	Melander	John
10003	219.10	19951016	50513001	Melander	John
10020	224.15	19951000	50511501	Nisbet	Walley
10020	167.13	19951028	50512501	Nisbet	Walley

My Computer

Listing-style Data



- Use the PREFORMATTED option instead of TABLE

Orders - Microsoft Internet Explorer

File Edit View Go Favorites Help

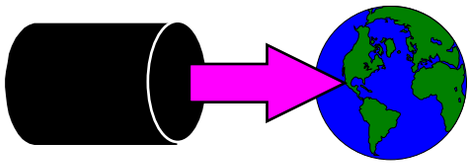
Address C:\TEMP\bcsales2.html

BC Sales over $100

```
Account # Amount Date Product # Last Name First Name
    10003         112.07    19951016  50511501 Melander         John
    10003         166.00    19951016  50512501 Melander         John
    10003         219.10    19951016  50513001 Melander         John
    10020         224.15    19951000  50511501 Nisbet           Walley
    10020         167.13    19951028  50512501 Nisbet           Walley
```

My Computer

HTML Exercise



- Create an HTML Table that looks like this:

Purchase History - Microsoft Internet Explorer

File Edit View Go Favorites Help

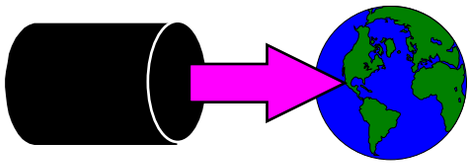
Address C:\TEMP\foo.html

Customer Purchase History

Acct #	Surname	Given Name	Credit Limit	Total Amount Purchased	# of Purchases	Earliest Purchase	Latest Purchase
10003	Melander	John	2500.00	497.17	3	10-16-95	10-16-95
10010	Humphreys	Wayne	2000.00	79.70	1	10-20-95	10-20-95
10016	Bamford	Tara	2000.00	243.53	2	10-20-95	10-20-95
10020	Nisbet	Walley	2000.00	391.28	2		10-28-95

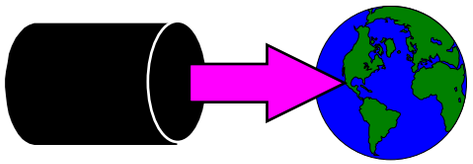
Done My Computer

Summary of formatting Commands



Command	***Options** (default underlined)*
Columns	Fixed <u>None</u>
Date	<u>None</u> <format> <“*separator*”> <invalid “ “>
Decimal	<u>Period</u> Comma
Delimiter	None <u>Comma</u> Tab “*string*”
Floating	<u>Default</u> Fixed Scientific
Heading	<u>None</u> Fieldnames “*string*” Column “*string*”
HTML	<u>None</u> Preformatted Table
Quote	None <u>Double</u> Single
Sign	None <u>Floating</u> Leading Trailing
Spaces	<u>None</u> Trailing
Zero	<u>None</u> Leading

Settings survive the task ....



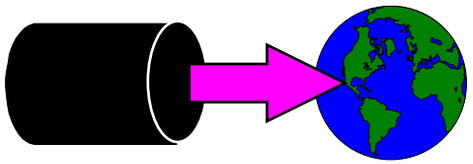
Specified settings apply to subsequent tasks

- Suprtool resets most settings at the end of each task
- STExport resets input and output files, but remembers your settings
- Can specify once, and use many times.
- To reset commands, you must set a new preference:

```
heading none
floating default
delimiter comma
```

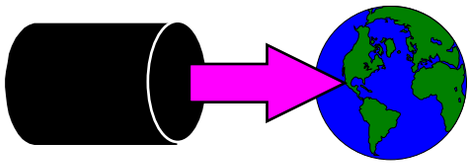
...etc

XML Command



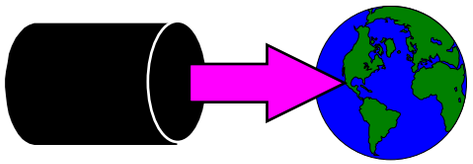
- XML Output
  - version
  - doctype
  - file
  - record

XML data



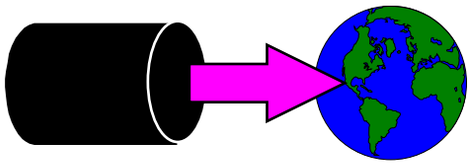
```
<?xml version='1.0' encoding='ISO-8859-1'?>
<Orders>
<Details>
<CITY>Los Altos</CITY>
<CREDIT-RATING>100000</CREDIT-RATING>
<CUST-ACCOUNT>4003302</CUST-ACCOUNT>
<CUST-STATUS>20</CUST-STATUS>
<NAME-FIRST>Ralph</NAME-FIRST>
<NAME-LAST>Perkins</NAME-LAST>
<STATE-CODE>CA</STATE-CODE>
<STREET-ADDRESS>Room 655</STREET-ADDRESS>
<STREET-ADDRESS>Los Altos    040033022</STREET-ADDRESS>
<ZIP-CODE>93002</ZIP-CODE>
</Details>
</Orders>
```

Xml Tag Characters



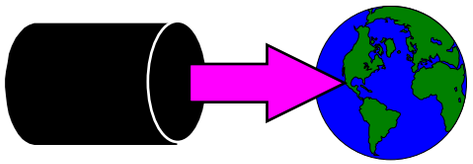
- Special characters in Tags
- Set xmltagchar “.”

New Stuff

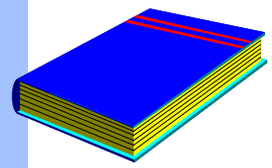


- Escape Command
- SQL import
- Some Database Importers require an “escape” character
- STExport takes care of this for you

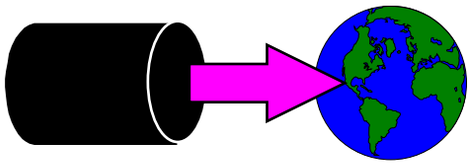
Clean your Data



- Clean command
- Replaces certain characters with whatever you choose
- Does all byte fields



Summary



- STExport reformats data for other applications
- Controlling STExport’s output layout
- Can be invoked in 3 ways on MPE
- Creating Web Pages
- Resetting defaults