



Customer Specified Placement & LPAR Delivery

A Better Idea – *What, Why & How*

Customer Specified Placement (CSP) & LPAR Delivery - Agenda

- ***What is it?***
- ***What does IBM offer?***
- ***What are the benefits?***





What is it?

Customer Specified Placement (**CSP**)

- *Specifically tailored hardware configurations built and delivered by IBM to accommodate unique customer requirements.*
- *Designed to permit specification of individual DASD and I/O adapter placement within the drawer/tower.*

Customer Specified Rack Placement (**CSRP**)

- *Designed to allow customer definition of component position in the rack.*

Logical Partitioning (L^{PAR})

- *Micro-PartitioningTM (Dynamic Logical Partitioning, LPAR) allows the partitioning of a single server into several completely independent virtual servers or logical partitions.*
- *Clients are taking advantage of LPAR to simplify operations and reduce cost by consolidating multiple single-application servers into a single server.*

The Challenge Today



*What does
IBM offer?*

On System i - Up To:

- 254 partitions
- 72 I/O drawers/towers
- 2700 internal disk drives
- 840 I/O adapters

On System p - Up To:

- 254 partitions
- 12 I/O drawers
- 192 internal disk drives
- 240 I/O adapters

Partitioning Technology has outpaced IBM
Planning, Ordering, Delivery and Implementation
tools and processes

Problem: How does IBM Deliver systems with all
of these components defined placed to meet our
Customer's expectations?



The traditional approach

Best Practices

- IBM will determine an optimum placement of all known devices within an order at no additional charge to the customer
- Based on Performance of a Single Partition System
- eConfig diagram does not flow to manufacturing

Now, IBM provides flexibility

Best Practices - OR -

The Customer can define placement

- The customer may request specific placement of I/O adapters and/or disk drives in certain locations.
- The customer may also request specific placement of components within a certain rack.
- IBM will provide such placement at the time the order is built.
- eConfig diagram now flows to manufacturing enabling customer definition to be built when CSP is selected.

IBM offers exact build-to-order capabilities that respond to customer specifications.



Placement in IBM Manufacturing Offerings- Details

Offer exact build-to-order capabilities that respond to customer specifications

Adapter and Disk Placement (New Systems Only)

Specific adapters in specific slots
Specific drives in specific bays

- ✓ Feature 8453
 - ✓ System i: 570, 595
 - ✓ System i: POWER6 570
 - ✓ System p: 575, 590, 595
 - ✓ System p: POWER6: MMA

- ✓ Feature 0453 (chargeable feature)
 - ✓ System i: 550
 - ✓ System p: 55A, 561, 570
 - ✓ System p: POWER6 570

- ✓ Feature 0456 (chargeable feature)
 - ✓ System i: 520, 525
 - ✓ System p: 52A
 - ✓ System p POWER6 520
 - ✓ System p POWER6 550

Component Placement in the Rack (New Systems Only)

Factory integration of system modules and enclosures at defined EIA locations

⇒ Rack tipping safety criteria are checked when this option is selected

- ✓ Feature 8469
 - ✓ System i: 570, 595
 - ✓ System i: POWER6 570

- ✓ Feature 0469 (chargeable feature)
 - ✓ System i: 520, 525, 550
 - ✓ System p racks: 7014 rack support for all 19" wide factory installed products
24" wide products, p5-575, p5-590 and p5-595 define rack placement via feature code

01/29/2008

Single Submit

Partition Definition and OS Preload

- System i Offering for 520, 550, 570, 595, and POWER6 570

Manufacturing will define LPAR partitions

- ✓ Feature 0454 (charge per defined partition)
 - ✓ Define partitions based on Planning Information
 - ✓ Initialization of DASD Protection by partition
 - ✓ Console and alternate console by partition
 - ✓ Can define partitions for i5-OS, AIX, LINUX

Manufacturing will preload selected partitions with OS & LPP's

- ✓ Feature 0455 (charge per preloaded partition)
 - ⇒ Preload AIX and I5/OS Operating Systems (OS) by partition
 - ⇒ Any Licensed Program Product (LPP) currently available for preload in manufacturing for single partition machines is now available for preload by partition
 - ⇒ Up to 20 partitions on the 595
 - ⇒ Up to 10 partitions on the 520, 525, 550, 570 and POWER6 570
 - ⇒ The SPT provides definition

Benefits:

- ✓ Productivity → Saves implementation time
- ✓ Customer Satisfaction → Preload extended to partitioned systems

Flexibility Provided by CSP/CSRP/LPAR *(New Systems Only)*

■ Implementation

- Plan for placement
- Configure your system using eConfig
 - Indicate feature code “0453/0456/8453” for CSP; feature code “0469/8469” for CSRP
 - **The eConfig drag and drop diagram interface can be used to initiate orders requesting hardware placement**
 - **If the SPT is used for planning, you should export your data to eConfig to ensure placement data is preserved**
 - Submit your order to IBM through your normal process
- IBM Manufacturing will use the CFReport placement definition to custom build the system
- Published availability is maintained for placement in manufacturing
- **The system will arrive as the customer specified**

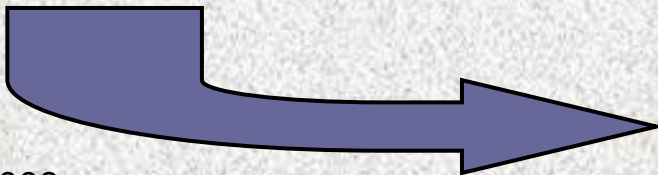
Benefits

What are the benefits?



- **Customers get the systems they ordered!**
 - Systems come configured to the customer's specifications
 - DASD protection by partition initialized
 - Systems are up and running faster
- **Customer personnel and Service personnel no longer have to rebuild the system**
- **Space in customer's location is no longer required to rebuild the system**
- **Quality is improved as components are not exposed to handling damage**
- **Customers know that their configuration will work before they try it**
 - This offering uses existing configuration and validation processes
 - System tested in manufacturing is not changed at installation
- **Improved Risk Management for Customer and Account Team**
- **You can still select "Best Practices"**

- **Lower Cost to Implement**
- **Saves Time**
- **Higher Quality**
- **Improved Customer Satisfaction**
- **Reduced Implementation Risk**



Customer Feedback

- Office Depot installed two large i5-595 systems with CSP in 1Q05

Susan Yoskin, Sales Specialist

“ I think it was a wonderful service. Office Depot has an enormous amount of LPAR systems, and I would say this saved days of work, as well as CE installation costs.”

- ⇒ Saved installation time
- ⇒ Reduced installation cost
 - ✓ Customer Personnel
 - ✓ IBM Personnel
- ⇒ Improved Customer Satisfaction
- ⇒ Improved Quality

Customer Feedback

- **The CSP process was used to configure several 9118-575's for a customer's DB2 Data Warehouse following the BCU standard.**

Johnnye Tamaru, AIX Specialist, Field Technical Sales Support

“The DB2 BCU standard is very stringent in the type, number and placement of adapters. By using the CSP process, we eliminated several hours of CE time needed to re-position the adapters to obtain correct placement along with the accompanying increased risk of equipment breakage. The CSP-based system reduced the on-site activities required to have a system working to an exact specification.”

- ⇒ **Saved installation time and cost**
- ⇒ **Eliminated risk of equipment breakage**
- ⇒ **System delivered to exact specification**
- ⇒ **Improved Customer Satisfaction**
- ⇒ **Improved Quality**



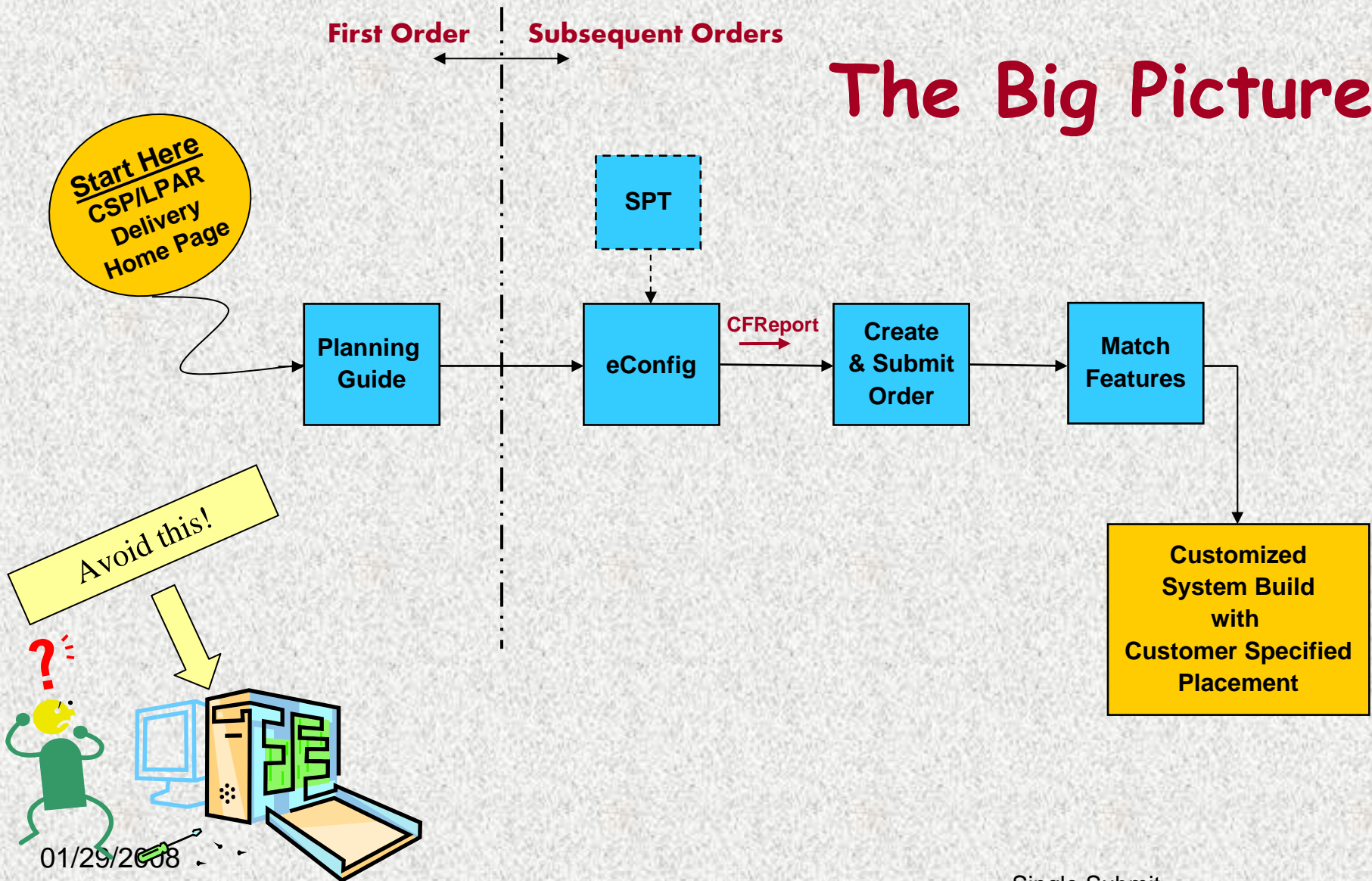
How do I order Placement?

- **Preparation**
 - This is exactly the level of planning you perform today
- **Considerations**
 - Manufacturing time for placement supports published availability
 - SSR customizing service as alternative to CSP is billable for these systems
- **Order Planning and Preparation**
 - Review **CSP & LPAR Delivery Planning Guide**
Available on the CSP & LPAR Delivery website
<http://www.ibm.com/servers/eserver/power/csp/index.html>
- **Submit your Order to IBM**
 - **Note: The order process now requires only a single submission for Business Partners in the US. A second submission via the CSP website is no longer required for US Business Partners.**

Ordering CSP/LPAR – Detailed Ordering Instructions

The Big Picture

First Order Subsequent Orders



01/29/2008

Single Submit

Start Here
CSP/LPAR
Delivery
Home Page



**Planning
Guide**

- **This planning guide presents and discusses the critical requirements, decisions, and process steps needed to successfully deliver this capability to your customer.**
- **Please read and follow the directions discussed in this guide**

Start Here (First Time User) - CSP & LPAR Delivery Home Page

<http://www.ibm.com/servers/eserver/power/csp/>

Customer Specified Placement

Related links

- System p LPAR information
- System i LPAR Information
- IBM System Planning Tool
- IBM eConfig
- IBM Partner World registration
- Techline Support: Partners

Customer Specified Placement & LPAR Delivery

Overview

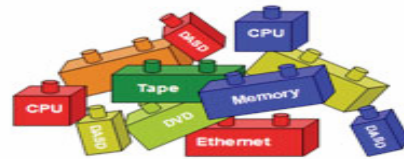
News

Description

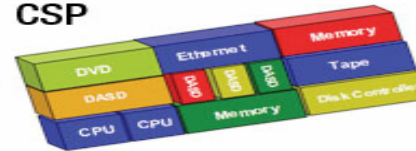
System i

System p

Need to build a system?



CSP



Let CSP do your Placement!

Customer Specified Placement (CSP) allows you to define and control how you want your system built. CSP enables IBM to specifically deliver your hardware configuration to meet your unique requirements.

Micro-Partitioning™ (Dynamic Logical Partitioning, LPAR) allows the partitioning of a single server into several completely independent virtual servers or logical partitions. LPAR Delivery will initialize and preload these partitions with the Operating System (i5OS/AIX) and selected Licensed Program Products.

US Business Partners and Distributors - Follow the Single Order Submission process. (See [Steps to Success](#))

All Other Customers - Follow the Dual Order Submission process. (See [Steps to Success](#))

Complete my Order



US Business Partners and Distributors omit this step

→ Submit my placement information to IBM - **Dual Submit**

We're here to help



[Contact us](#)

[FAQs](#)

Getting Started



[Steps to Success](#)

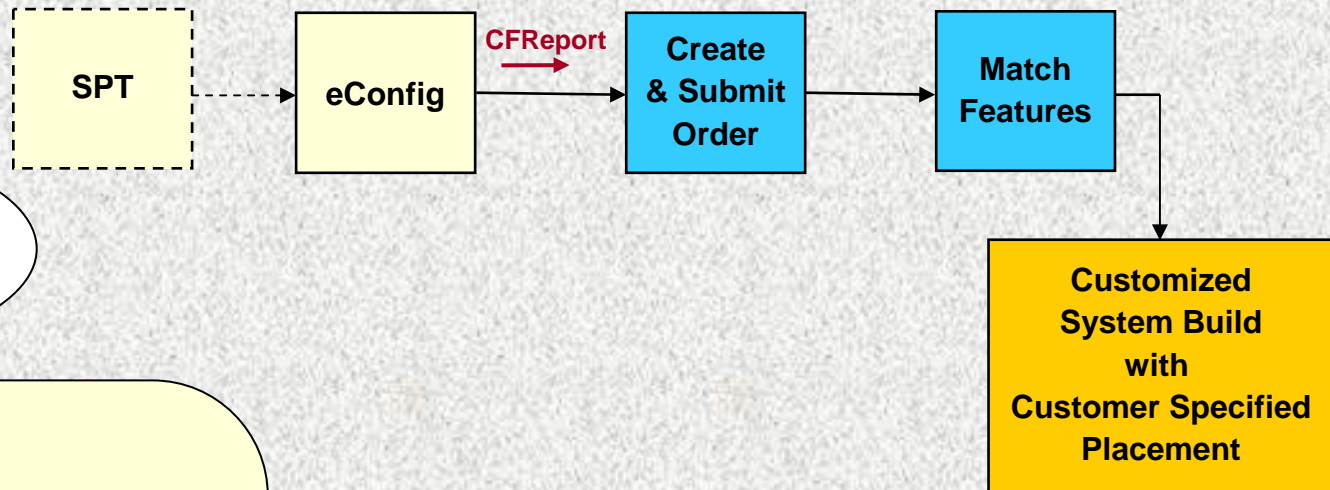
The CSP Advantage



[CSP Education-Single Submit \(1.29MB\)](#)

[CSP Education-Dual Submit \(1.29MB\)](#)

Start Here to Place Order



LVT files can be uploaded into the SPT to be updated.

➤ Define placement

➤ The Sales/Marketing Configurator (eConfig) enables modification of adapter and disk placement and must be used to define enclosure in rack placement.

➤ The SPT provides detailed LPAR Planning assistance and should be used to establish your partitioning and placement definitions

➤ All placement definition is validated by eConfig

➤ Configure your system using eConfig. Indicate “0453/0456/8453” for CSP; feature code “0469/8469” for CSR

➤ Placement and partition planning information should be imported from the SPT directly into eConfig, except for NewSys orders (SPT does not directly support custom placement for NewSys orders).

➤ Placement information can be modified using the ‘drag and drop’ interface on the eConfig diagram.

Bridging from the SPT to eConfig

System: iSeries-570 (IBM eServer i5 9406/570) Report | H

Place Hardware

Specify how you want the hardware placed on your new system.

Display system/expansion unit: 9406_570-0-0 Model 9406-570 [Work with system/expansion units](#)

Hardware slots

Display hardware supported by: V5R3M0 [Show expanded view](#) [Hide validation messages](#) [Additional features...](#)

Action	Location	F/C	Partition	Order status	S/N	Description
<input checked="" type="checkbox"/>	P3-(D1:D3)	4326(3)	P1 - V5R3M0 [P1-T12]			35.16GB 15k RPM Disk Unit
<input checked="" type="checkbox"/>	P3-(D4:D6)	4326(3)	P1 - V5R3M0 [P1-T12]			35.16GB 15k RPM Disk Unit
<input checked="" type="checkbox"/>	P4-D1	5751	P1 - V5R3M0 [P1-T12]	IBM		IDE DVDROMBO
	P4-D2		Blocked by slot "D1"			IDE DVDROM AIX/Linux only
<input checked="" type="checkbox"/>	P1-C1	9844	P1 - V5R3M0	IBM		Base 64 MB IOP
<input checked="" type="checkbox"/>	P1-C2	9793	P1 - V5R3M0 [P1-C1]	IBM		Base 2-Line WAN w/Integrated Mode
<input checked="" type="checkbox"/>	P1-C9	5726	P1 - V5R3M0 [P1-C1]	IBM		RAID Enabler Card
	P1-T12	570B	P1 - V5R3M0 [P1-C1]			Embedded DASD Controller
	P1-T15	IDEC	P2 - AIX_HOSTED			Integrated IDE AIX/Linux controller
	P1-T14	570B	Not Assignable			Integrated AIX/Linux Disk Ctrl
	P1-T6	EETH	P1 - V5R3M0			Embedded 1 Gbps Ethernet (2 Ports)

Import Configuration Report

Create a base system for upgrade by choosing one of the following:

- Import local file
- Import from Retrieval
- Manual entry into BaseEdit (No configuration report)
- Previous unsaved import

Import a configuration report to restore one of the following:

- Initial Order
- Upgrade (Base and Proposed selections)

Edit before importing

OK Cancel

IBM System Planning Tool

System plan: New system plan

Export

Export the configuration of one or more systems for purchase.

Select	Name	Type	Status	Description
<input checked="" type="checkbox"/>	iSeries-570	IBM eServer i5 9406/570	Edit partitions <input checked="" type="checkbox"/> Valid Place hardware <input checked="" type="checkbox"/> Valid Define load source (Boot device) <input checked="" type="checkbox"/> Valid Define consoles <input checked="" type="checkbox"/> Valid	medium iSeries sample

Export Cancel

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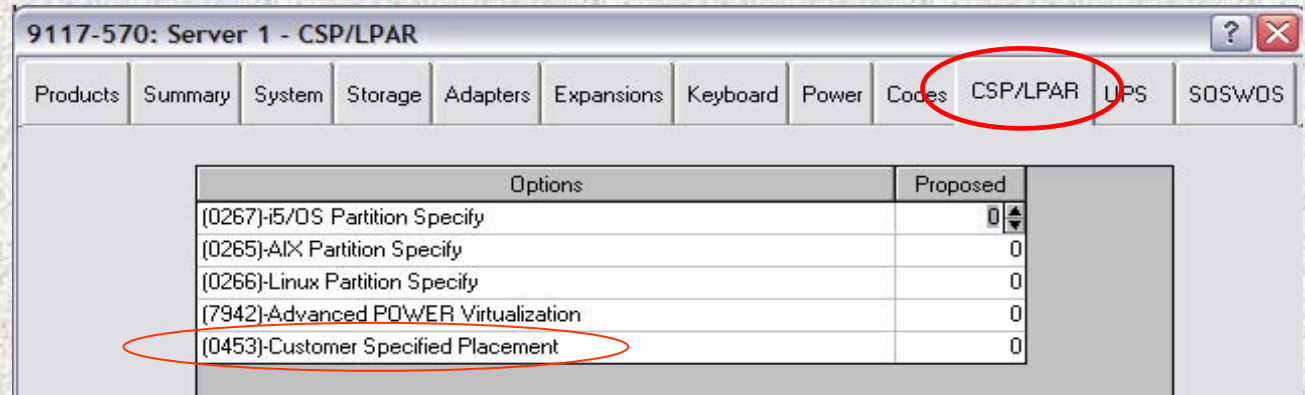
Single Submit

Selecting CSP & CSR

CSP/LPAR Tab in eConfig

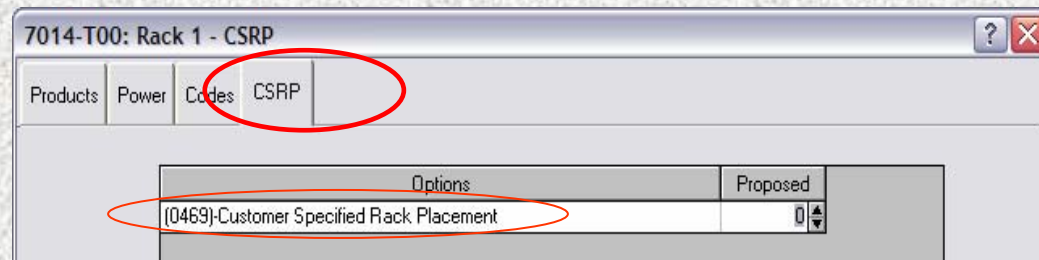
Select, Define, and Order:
CSP – system i, system p

Partition Initialization –
system i
Partition Preload –
system i



CSR Tab in eConfig

Select, Define, and Order:
CSR – i systems
CSR – p systems in
7014 racks



Adding DVD Hardware to the Placement View

The screenshot displays a hardware configuration interface. On the left, a tree view under 'Additional Hardware' lists various components. The '(2640)HDE Slimline DVD-ROM Drive' is highlighted with a red circle. Below this is a 'Wizard' section with a tree view showing the configuration path: '9117-570: Server 1' > 'Services'. On the right, two server rack diagrams are shown. The top diagram is a baseline configuration. The bottom diagram shows the same configuration with a yellow highlight on a slot in the 'RAID SCSI Card Slot' section, and a red arrow pointing to it from a text box.

1. Hardware | 2. Software | 3. Peripherals | 4. Services

Description

- (1800)HSL-2/FIO-G Ports - 2 Copper
- (1819)GX-Dataport 4x1B HCA
- (2640)HDE Slimline DVD-ROM Drive
- (2738)2-Port USB PCI Adapter
- (2849)PDWER GX/T135P Graphics Ace
- (2943)8-Port Asynchronous Adapter EIA-2
- (2944)128-Port Asynchronous Controller, I
- (2947)HBM ARTIC960Hx 4-Port Multiproto
- (2962)2-Port Multiprotocol PCI Adapter
- (3274)73.4 GB 10,000 RPM Ultra320 SC
- (3275)146.8 GB 10,000 RPM Ultra320 SC
- (3277)36.4 GB 15,000 RPM Ultra320 SC
- (3278)73.4 GB 15,000 RPM Ultra320 SC
- (3279)146.8 GB 15,000 RPM Ultra320 SC
- (3578)300 GB 10,000 RPM Ultra320 SCS
- (4959)HBM Token-Ring PCI Adapter
- (4962)10/100 Mbps Ethernet PCI Adapte
- (5700)HBM Gigabit Ethernet-SX PCI-X Ada
- (5701)HBM 10/100/1000 Base-TX Ethern
- (5703)PCI-X Dual Channel Ultra320 SCSI
- (5706)HBM 2-Port 10/100/1000 Base-TX
- (5707)HBM 2-Port Gigabit Ethernet-SX PCI
- (5712)PCI-X Dual Channel Ultra320 SCSI
- (5713)1 Gigabit iSCSI TOE PCI-X on Cop
- (5714)1 Gigabit iSCSI TOE PCI-X on Opti
- (5716)2 Gigabit Fibre Channel PCI-X Adap
- (5718)10 Gigabit Ethernet-SR PCI-X Ada
- (5719)HBM 10 Gigabit Ethernet-LR PCI-X,
- (5723)2-Port Asynchronous IEA-232 PCI X
- (5736)PCI-X Dual Channel Ultra320 SCSI
- (5737)PCI-X Dual Channel Ultra320 SCSI
- (5740)HBM 4-Port 10/100/1000 BaseT Et
- (5751)HBM 4.7 GB IDE Slimline DVD-RAM

Qty | Wizard

- Global Settings
- Price File: US:Dollars:POWER5 based System
- Total Configuration Services Options
- Software Default Options
- Software Mass Update
- 1 9117-570: Server 1
- Software Products (9117-570: Server 1)
- Services

Diagram | Messages | Proposed |

To Fit

9117-570: Server 1: 7200_1

9117-570: Server 1: 7200_2

The area in yellow depicts A "drag & drop" operation In progress.

Newsys Orders, System i only

- *SPT does not directly support custom placement in a NewSys order.*
- *There are two ways to facilitate custom placement for a NewSys order.*
- For both methods:
Import an existing CFReport for the upgrade and then select NewSys on Products page of the server wizard:

9406-570: Server 1 - Products

Products Summary System Storage Adapters Expansions Keyboard Power Codes CSP/LPAR UPS Serv

Product Information

Model: 9406-570

Name: Server 1

Configuration Type

Server/Value Package: (0937)-2.2GHz 2/16-Way (8100/58)

Edition: (7760)-Capacity Backup Edition - Mc

Configure as NEWSYS

Operating System

Primary OS: i5/OS V5R3 (will be wd 01/04/2006)

Additional OS

AIX 5L V5.2

AIX 5L V5.3

Red Hat Linux AS 4

Preinstall Option: No Software Preinstall

Total Memory (GB): Select on System Tab

Processors	Proposed
(7258)-570 Full Enterprise Enable	0
(7260)-570 Enterprise Enablement	0
(7618)-570 One Processor Activation	6

Configuration Information: Processor Activation Slot: 8 of 16 used

Feature Code: Search Results:

Interim Price < Previous Next > Configure Cancel

NewSys cont.

- On CSP/LPAR page, select CSP feature (0453, 0456, 8453, etc.).
- -There is a check box below the options stating:
Do you plan to submit a separate SPT originated CFReport to the CSP Web Repository.
- **Please read the information in the box directly below this check box option carefully as it contains information on two ways to facilitate custom placement for a NewSys order.**

9406-570: Server 1 - CSP/LPAR

Products Summary System Storage Adapters Expansions Keyboard Power Codes **CSP/LPAR** UPS Serv

Validate placement by partition

Options	Proposed
(0140)-Logical Partitioning Specify	7
(0142)-Linux Partition Specify	0
(0145)-AIX Partition Specify	5
(7942)-Adv Power Virtualization	1
(8453)-Base Customer Placement	1
(8469)-Base Custom Rack Placement	0

Do you plan to submit a separate, SPT originated CFReport to the CSP Web repository?

SPT does not directly support custom placement in a NewSys order. There are two ways to facilitate custom placement for a NewSys order.

1. Do not check the above check box and perform all the custom placement in this current configuration using custom placement view and submit the CFReport from this session to the CSP repository in addition to using it for order forward.
2. Check the above check box and use the CFReport from this current configuration for standard ordering purposes, but do not submit this CFReport to the CSP Web Repository as it will not have the custom placement information. For the CSP web repository CFReport,

Feature Code: Search Results:

Interim Price < Previous Next > Configure Cancel

Information included in eConfig text box about NewSys orders:

SPT does not directly support custom placement in a NewSys order. There are two ways to facilitate custom placement for a NewSys order.

If you have any questions about this process use the "Contact Us" link in the CSP Website.

1. Do not check the above check box and perform all the custom placement in this current configuration using custom placement view (drag and drop method) and submit the CFReport generated from this session for order processing . Submit the .cfr file to IBM via the csp website if using dual submit process, the custom placement information will automatically be sent with the order when using the single submit process. (Currently the single submit process is only available to US Business Partners and Distributors).

2. Check the above check box and use the CFReport from this current configuration for the standard ordering purposes, but do not submit this CFReport via the CSP website as it will not have the custom placement information.

Create a new (independent) CFReport by following these steps:

a) perform custom placement in SPT

b) export CFReport from SPT

c) restore the SPT CFReport in eConfig as an initial order and address any errors

d) ensure the hardware of the NewSys order matches the hardware from this current configuration

e) if using dual submit process, submit the eConfig generated CFReport via the CSP website -- but do not forward this CFReport for order processing .

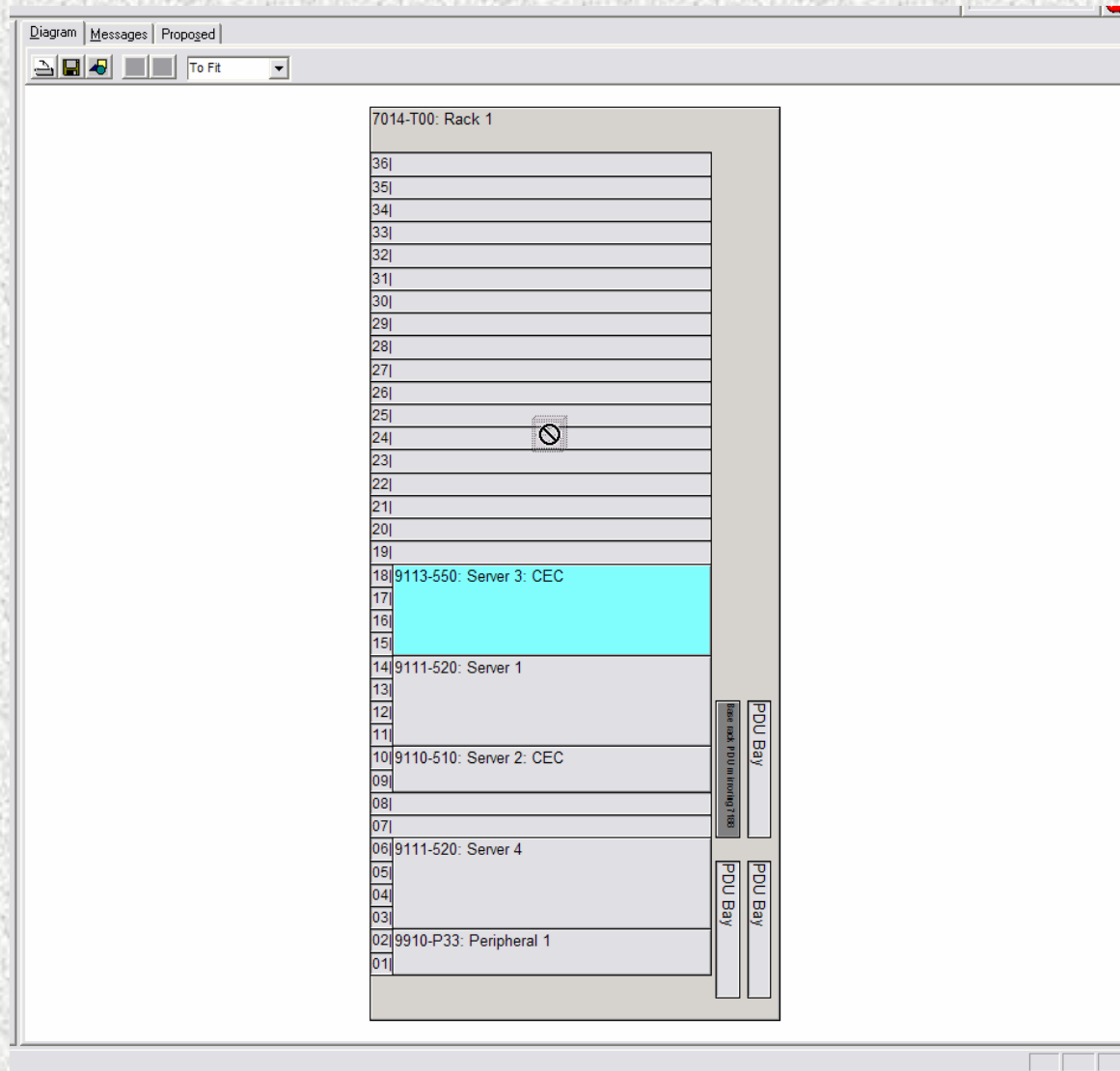
OR

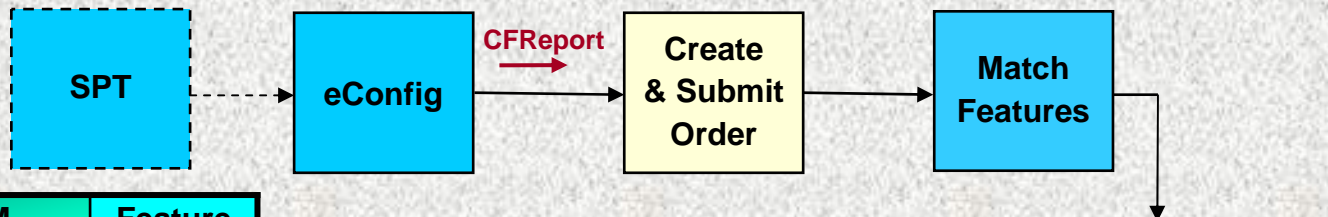
f) if using single submit process, your will receive an email with instructions on submitting this CFReport.

Specifying Drawer in Rack Placement

Rack placement view

- Enables drag & drop placement of drawers in racks
- The highlighted drawer and cursor icon in the figure depicts a “drag & drop” operation in progress



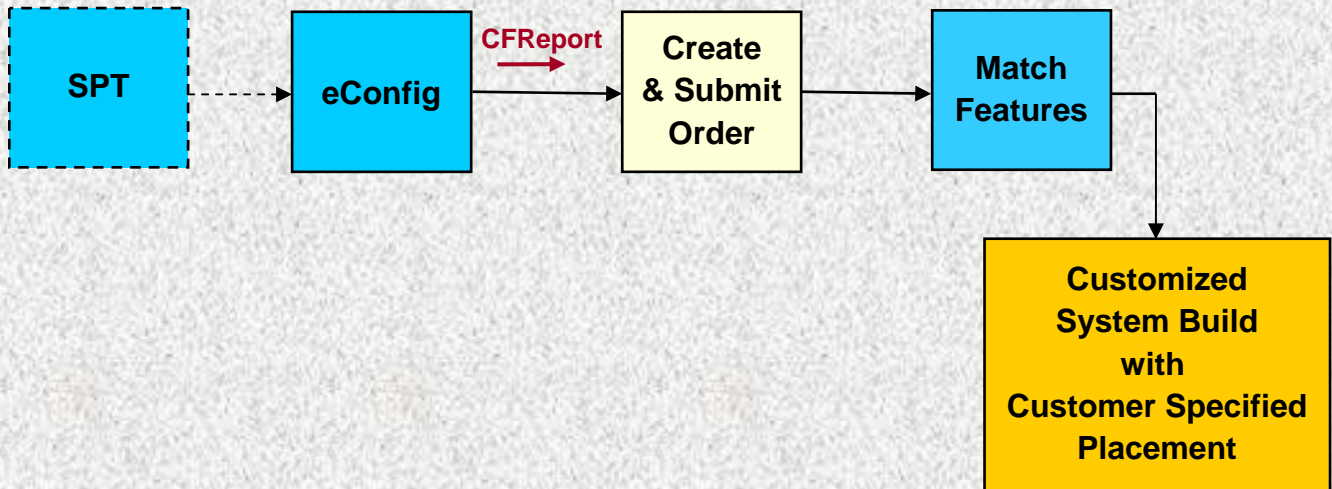


Order Information
 Placement information is established during a sales configuration session. This information is included in the sales configuration output file (CFReport).

CSP	MTM	Feature
System i, POWER5 supported servers	9406-595	8453
	9406-570	8453
	9406-550	0453
	9406-525	0465
	9406-520	0456
System i, POWER6 supported servers	9406-MMA	8453
System p, POWER5 supported servers	9119-595	8453
	9119-590	8453
	9118-575	8453
	9117-570	0453
	9116-561	0453
	9133-55A	0453
System p, POWER6 supported servers	9131-52A	0456
	9117-MMA	0453
	8204-E8A	0456
System p, POWER5 & POWER6 supported I/O subsystems	8203-E4A	0456
	9411-100	8453
	7311-D11	8453
	7311-D20	8453
	7031-D24	8453
	7031-T24	8453

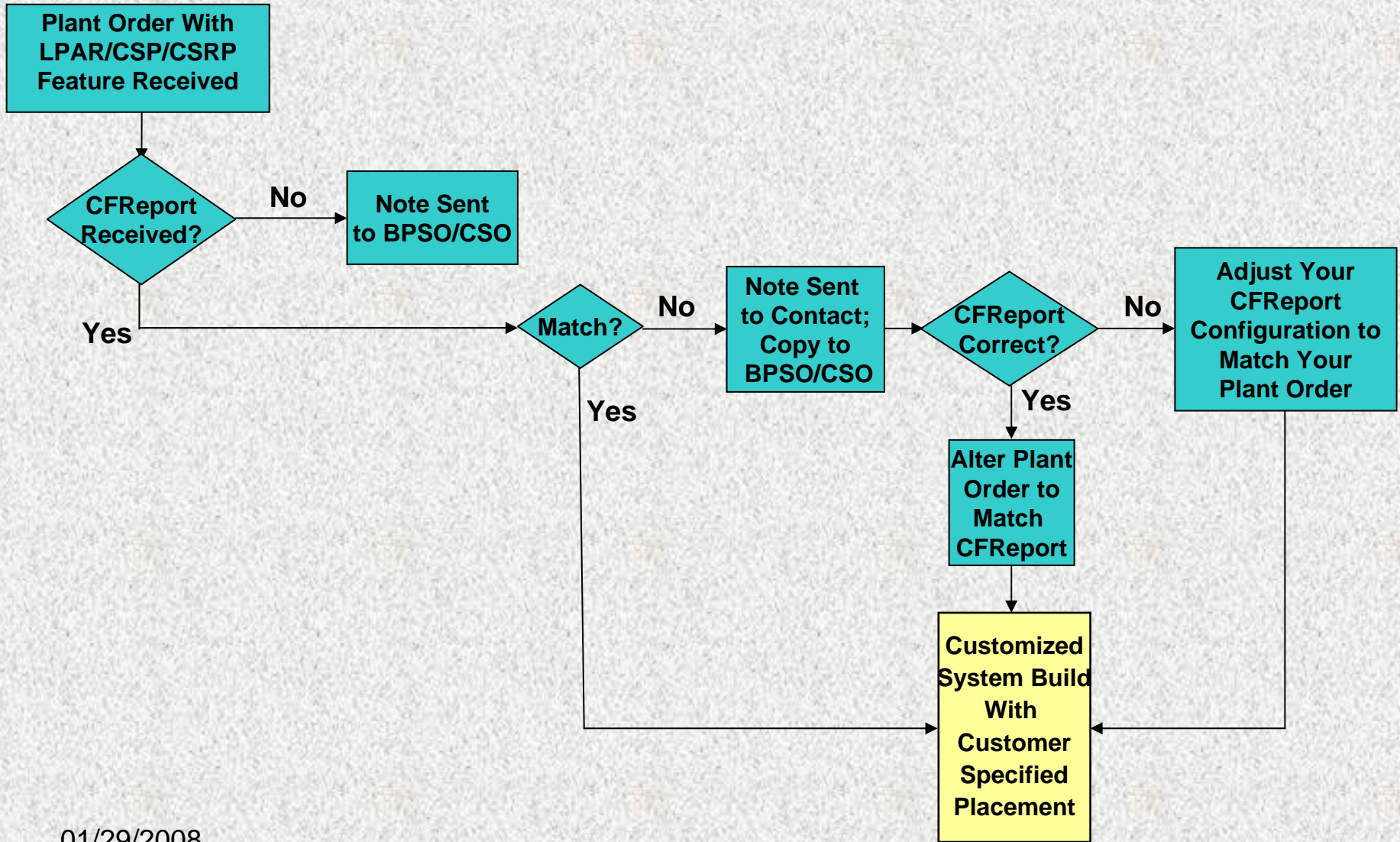
CSRP	MTM	Feature
System i, POWER5 supported servers	9406-595	8469
	9406-570	8469
	9406-550	0469
	9406-525	0469
	9406-520	0469
System i, POWER6 supported servers	9406-MMA	8469
System p, POWER5 & POWER6 supported racks	7014-T42	0469
	7014-T00	0469
	7014-S25	0469
	7014-S11	0469

Single Submit



Create and submit your order through the IBM order process.

How Your CSP Order Is Validated



Communication –CFReport Missing

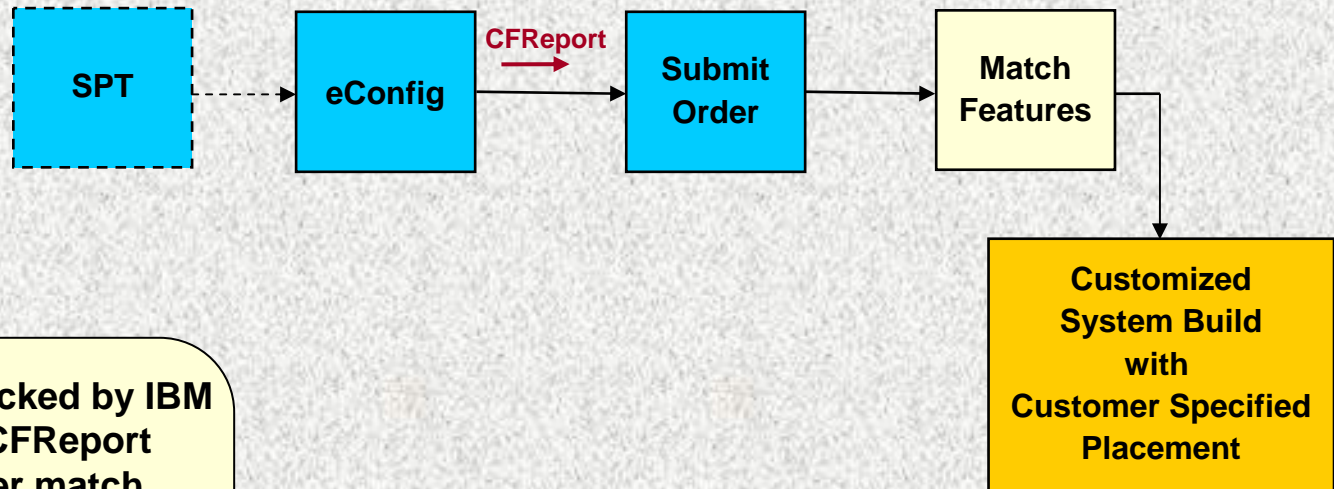
This note will be sent by IBM manufacturing to the IBM Business Partner Support Organization / IBM Customer Support Organization. They will contact the customer representative to request that the CFReport file be submitted.

Your order # (insert PLORN here) was received and contains one or more of the Customer Specified Placement features (0453/0456/8453, 0469/8469) which requires an eConfig generated CFReport file (._cfr). **We have not received the CFReport file for this order.** Please contact the sales rep or business partner for this order and request that the CFReport file be attached to the Order Completion Form found on the CSP website (the link to this website is shown below). Please confirm that the file has been submitted by responding to this notice.

Thank you

HYPERLINK <http://www.ibm.com/servers/eserver/power/csp/index.html>

**This messages needs
re-wording**



➤ Your order is checked by IBM to ensure that the CFReport output and the order match.

➤ Changes to either the order or to your plans after order submission require your coordination.

Changes to existing orders will likely change placement requirements. Mismatched placement and order information, alterations and late planning changes will likely cause your order to be delayed or require cancellation. Ensuring the placement specifications and the order stay synchronized will enable IBM to deliver a quality solution. Synchronization tips and techniques are discussed in the CSP and LPAR Delivery Planning Guide.

Communication – Mismatch of Order and CFReport information

This note is sent to the contact names on the Order Completion Form and a copy is sent to the **IBM Business Partner Support Organization / IBM Customer Support Organization**

Hello , your plant order and the CFReport file were received, however there is a mismatch between your CFReport file and your plant order as listed below.

Plant Order #	
MT/Model	
System #	

Feature or MT/Model	.cfr file qty	Plant Order Qty

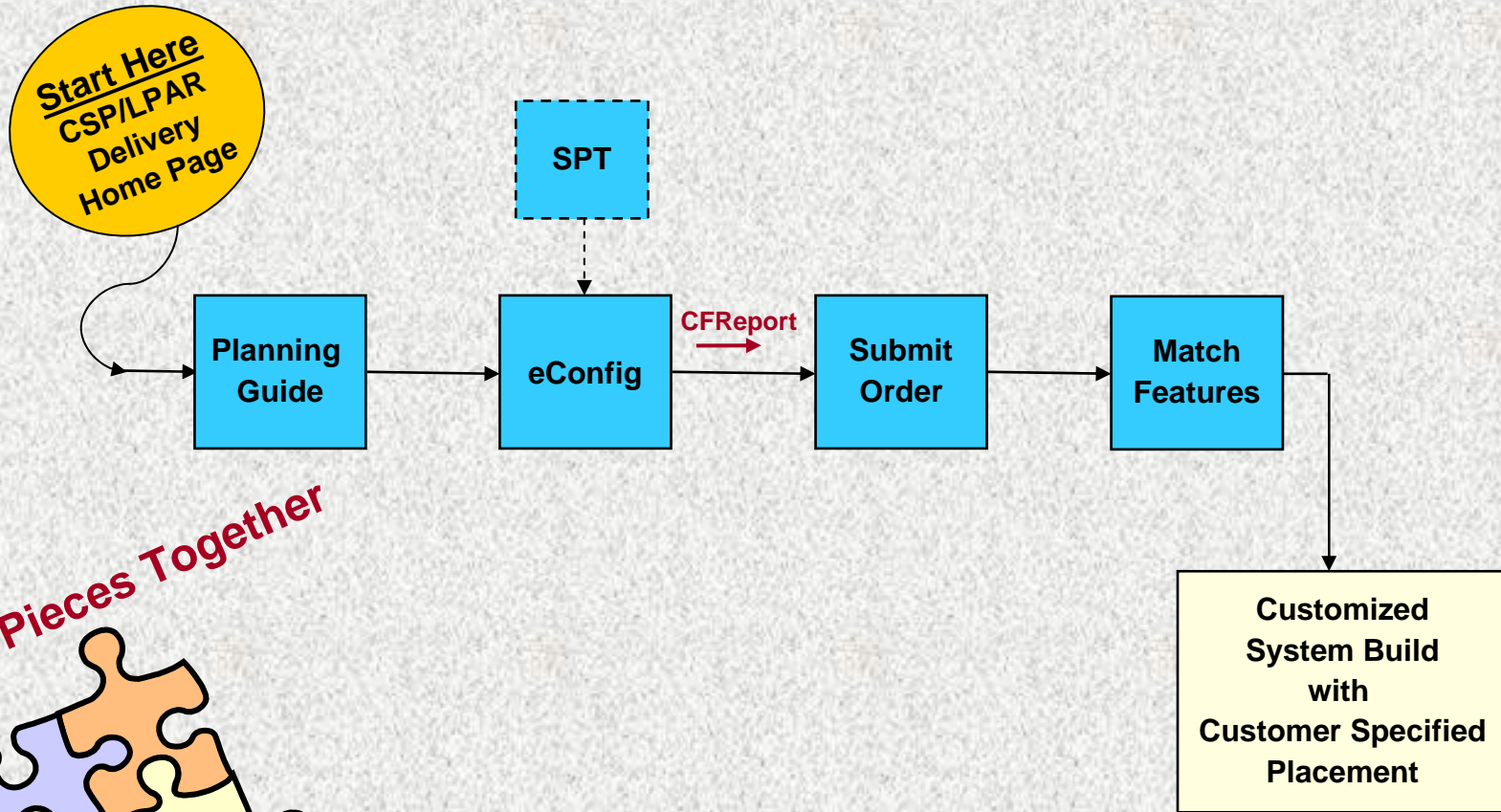
If your CFReport file is correct, you will need to have BPSO/CSO alter your plant order to match the CFReport file. Please respond to the analyzer via email (reply with history) if the order is being altered.

If the plant order is correct you will need to adjust your CFReport configuration to match your plant order. Please attach your new CFReport file and send to the analyzer via email (reply with history) so the CFReport database can be updated with the corrections.

01/29 Thank you.

Single Submit

Your Customized System Is Built !



Fitting the Pieces Together



01/29/2008

Single Submit

The CSP & LPAR Solution !



- **Lower Cost to Implement**
- **Saves Time**
- **Higher Quality**
- **Improved Customer Satisfaction**
- **Reduced Implementation Risk**

