MetaSolv TBS

Contents

Introduction

MetaSolv's Telecom Business Solutions (TBS) software is designed to make our jobs easier. This is a central repository of all the information we need in order to provision, design, troubleshoot, and even terminate our voice and data services.

The most important factor, though, in making TBS a useful tool rather than just "another software program we gotta learn" is YOU.

You will be using it daily, you will be the one to see a need (or even something in the program we don't need). Tell us about it. The database is designed with our partners' needs in mind; if it isn't meeting those needs, we will fix it.

Thanks!

Your TBS Development and Administration Team

TBS (Telecom Business Solution) is a relational database that houses just about any type of information for a network or customer that you'll need in your daily routine. Even not-so-daily routines...

TBS is:

- An asset management tool for NewSouth-owned network nodes, physical or virtual, hardware (PoP+c. premise), and facilities, owned or leased.
- A customer information database of record for NewSouth.
- A network provisioning tool for port assignment, circuit design, "space" assignment, bandwidth allocation, among others.
- A work management/service delivery tracking system providing services like order notification, status tracking and order

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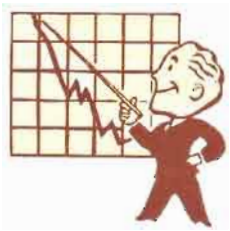
We'll talk about how to...

- Log into TBS
- Enter a new customer in TBS
- Enter a new order in TBS
- Locate a customer or order
- Add comments
- View hardware
- Find provisioning information
- View usage reports
- Use the Work Management Tool
- LERG
- Starting a New ISR in TBS
- Completing the Administration Tab of an ISR
- Completing the Assoc LEC Info, Circuits, Remarks, and Notes tabs
- How to Queue a New ISR
- How Do I View My Work Queue?
- Creating a DLR
- Completing a Task



Our duties:
To get you comfortable with TBS and ready to use it to help make your job easier.

Your duties:
To ask questions, make comments about TBS and its functions, and use the tool.

TBS is not intuitive...

As with any tool, it takes time and practice to become proficient with the system and have it help you do your job more easily (and faster!). It won't bite if you make a mistake so feel free to wander around in it and discover just how well this tool will work for you.

Basic Training

TBS is a database designed to house customer and equipment information. NewSouth has chosen to house customer and internal network information. Eventually, it will be the only CIR, the customer database of record.

It is a tool and, as we all know, a tool is only as good as those who use it. This database will make our work much easier by having easy access to all information needed by various departments on an installation or for troubleshooting a customer's Data Services connection in one place.

As well as being a tool for asset management, a customer information database, a network provisioning tool, and a work flow management tool capable of tracking workload as well as initiating tasks for an individual or group, TBS also is a virtual representation of the complete physical network. If it's a piece of hardware and owned by NewSouth, it should be in the database.

TBS will also be used (partially) as a design tool for customer turn-ups. It can create a detailed DLR (design layout record) and crude, but useful, one-line drawings. These designs aren't meant to be the sole engineering specifications, but act as supporting documentation. In addition, you'll be able to come back to an old design to see what's existing or what has changed. This is an aid for ongoing operational troubleshooting and maintenance.

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Acronyms Used

- **TBS:** Telecom Business Solutions
- **CIR:** Customer Information Record
- **DLR:** Design Layout Record
- **LERG:** Local Exchange Routing Guide
- **ASR:** Access Service Request
- **PSR:** Product Service Request
- **LSR:** Local Service Request
- **CSR:** Carrier Service Request
- **ISR:** Internal Service Request

Logging into TBS

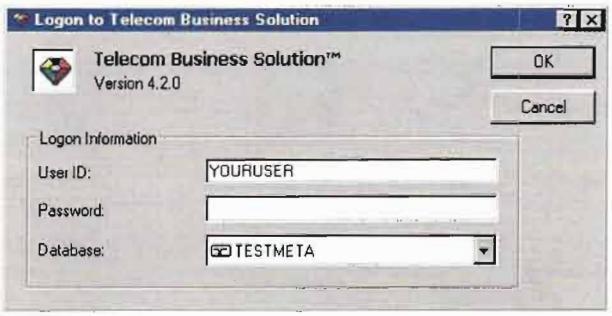
To log into TBS and its databases (we use the development database, DEVMETA, for this example):

1. Click on the *TBS icon.*
2. Type in your userid (ex: coll0419).
3. Type in your password. The default password is your userid (ex: coll0419). You will be prompted to change your password at your first login.
4. In the Database field, pull-down window to DEVMETA.
5. Click *OK.*

Once you login, the primary option module (beginning screen) appears. The tab options are:

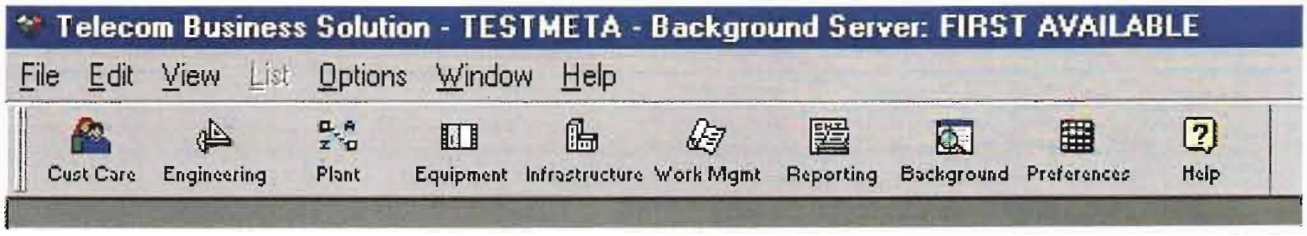
- Cust Care
- Engineering
- Plant
- Equipment
- Infrastructure
- Work Mgmt
- Reporting
- Background
- Preferences
- Help

All the preferences are customized to your personal account. How to customize your TBS views, among other preferences, will be detailed in this training.



Primary Options Module

This is the beginning toolbar where you will make your initial selections of what you want to do in TBS.



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Finding Provisioning Information

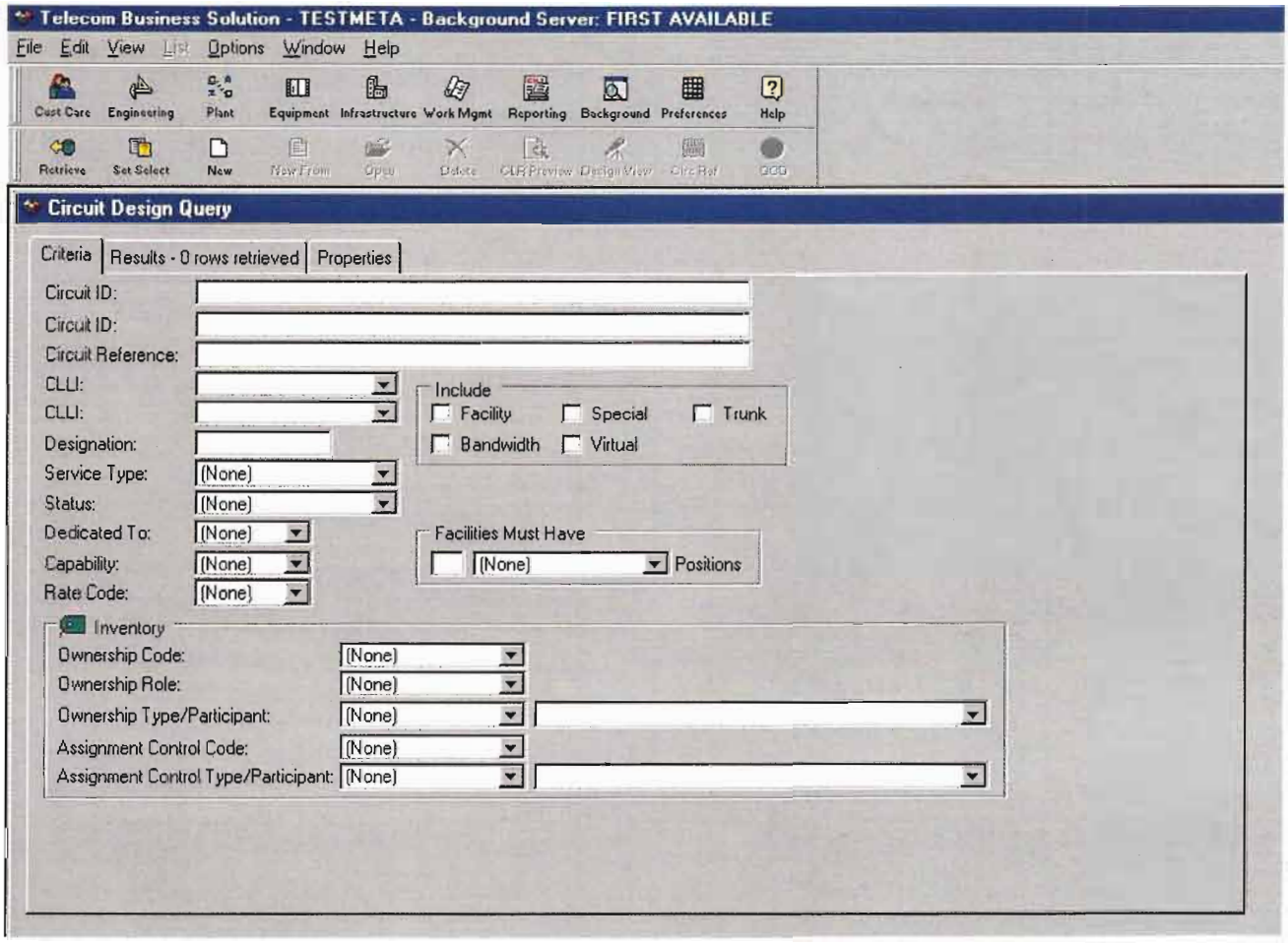
There are several ways to find provisioning information in the database. In most cases, the easiest way to locate a customer or circuit is through use of circuit references.

Circuit references are simply searchable items that are logged to a customer record. The number of references for any given customer is virtually unlimited, and the more references, the easier the circuit is to find.

TBS allows you to locate any circuit or customer that has these Circuit References by:

1. Login
2. Click on *Engineering*
3. Click on *Circuit Design*. Enter the reference information, either complete or partial into the *Circuit Reference* field.
4. Check a box for the type of circuit such as *Facility*, *Special* or *Virtual*
5. Click *Retrieve*

You will be able to view the circuit's description, administrative information and Design Layout Record (DLR). The DLR is the line-item design output that is generated for the circuit that includes elements like cross-connects, port and channel assignments, equipment locations and termination information. It is the 'blueprint' for that particular circuit.



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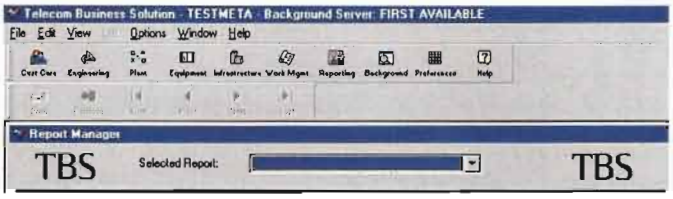
Viewing Usage Reports

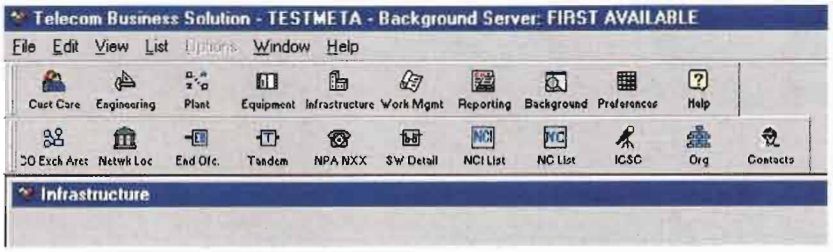
TBS provides for viewing usage reports for a number of different functions. These functions range from facility utilization and order logs, to product catalogs and task/work queue details, among others. TBS rel. 4.2 offers 24 different types of reports such as equipment specifications and capacity, facility utilization by location, product catalog, work queue productivity, among others. Initially, the hardware and facility utilization will probably initially be the most useful. This helps understand network dynamics, market growth, and bandwidth usage, while aiding in hardware warehousing, capacity planning, and required future network build-out. There are several methods to view this usage, and generate the reports. One method is:



1. Login
2. Click on *Reporting*
3. Click on *Reports*
4. In the *Selected Report* pull-down window, click on the desired type of report to be generated.

How the information will be viewed is up to you, the user. For example, Facility usage may be viewed by specific rate code, A or Z location (node), A or Z location (segment), specific channel or port level, etc. In this respect, the usage reports are very detailed.

LERG



As our network expands, it is critical to keep track of the available, provisionable network. TBS has the latest version of the Bellcore LERG (Local Exchange Routing Guide) for NewSouth's current target markets. The LERG is the repository for all network descriptions, locations, CLLI, and ownership for network elements within a given service area. Each time a new node is added to the network (POP, switch, router, DACS), it is named by CLLI code and recorded in the LERG. Here's how to locate these elements:

1. Login
2. Click on *Infrastructure*
3. Click on *Network Loc.* You'll be prompted to enter information to search upon. This info can be complete or partial [type partial information: LIKE%Partial info%]. You'll definitely want to add some information to narrow your search, even just the state or city name. The LERG is enormous. Though our TBS log is incomplete, our LERG still contains over 50,000 elements!
4. Enter the searchable information and click *Retrieve*
5. Scroll down to find the specific entity you seek. There can be several network elements with CLLI prefixes that are very similar. For example;

GNVLSCLV00W
GNVLSCLVH02
GNVLSCLV001

Only the last 3 digits of these network nodes differ because these network elements are all in the same building location. If you performed a search using the city of Greenville and a CLLI prefix of %GNVLSCV% you would receive these results plus probably many more.

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Starting a New ISR in TBS

One of the first steps to building a Design Layout Record (DLR) for a DS1, DS3, or STS1 facility is to generate an Internal Service Request (ISR). The ISR allows you to place a circuit request in the database, and specify assignments (circuit type, locations, hardware) in the form of a DLR. To begin entering a new ISR:

1. Login
2. Click on the *Cust Care* tab
3. Click on the *Serv Req* tab
4. Click on the *New* tab and a box titled *Service Request Types* will appear.
5. Within this box select *Internal Service Request* and click *OK*.

Congratulations, you've just started your new ISR! Next, we'll need to complete the Administration tab...

Completing the Administration Tab of an ISR

A tab labeled *Administration* should appear, and automatically log the date and time of the ISR entry. Boxes that are highlighted in blue are required fields, and rarely can be edited after they are saved. All others will generally accept changes with little effort. The *Administration* tab is the general information area for the circuit(s).

Complete the appropriate entries into the following fields:

a. *Desired Due Date*: Get this information from the customer's specific service request or order form

b. *Request Type*: Facility

c. *Activity*: N = New Installation

d. *Billing Indicator*: None

e. *Organization*: NewSouth

f. *Number of circuits*: From the specific service request or order form

g. *Order number*: Will automatically be added

h. Click *Save* to proceed.

More tabs will appear: *Assoc LEC*, *Circuits*, *Remarks* and *Notes*. You'll need to enter information here as well...

Completing the Assoc LEC Info, Circuits, Remarks, and Notes tabs

Once you click *Save*, four (4) additional tabs will appear: *Assoc LEC Info*, *Circuits*, *Remarks*, and *Notes*. The information contained in these tabs is specific, and unique, to the individual circuit. Complete these tabs as follows:

Assoc LEC Info

Enter the proper LEC for the market in which the circuit is to be provisioned. For example, for a T-1 being turned up in Atlanta, you would select BST-GA. Fill in any other pertinent information.

Circuits tab

Click on the white paper icon, and the *Circuit Identification* page will appear. This is where you will "name" the new circuit, give it a description, and assign its A-Z locations. Complete as follows:

1. *Circuit Type*: CLF Format (Structured)

2. *Service Type Category*: CLFI

3. *Service Type Code*: Designated by NC/NCI codes; generally

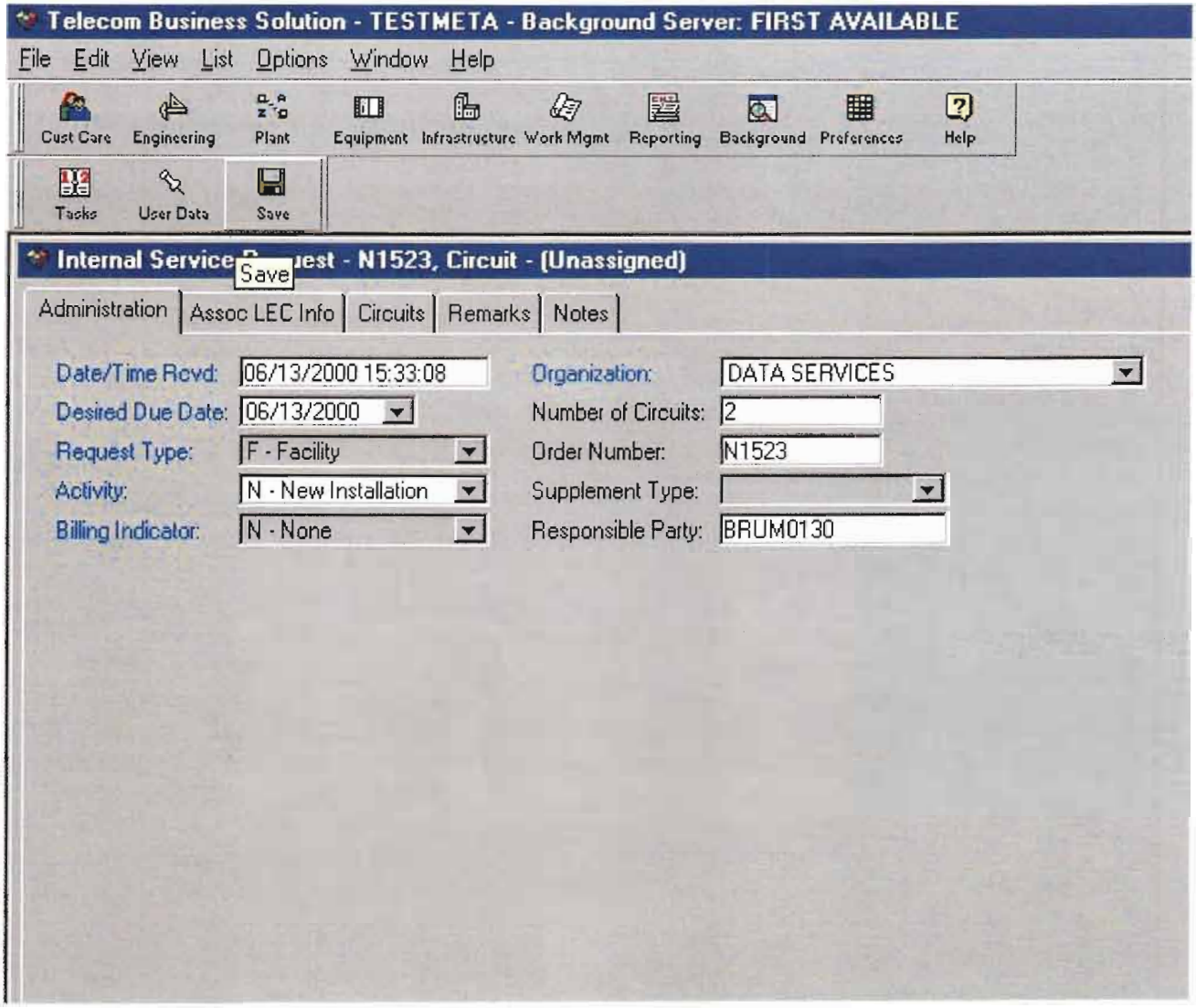
- T1ZF for DS1s
- T3 for DS3
- ST01 for STS-1s

4. *Order number*: Will automatically be added
5. Jurisdiction: N/A (Multiple)
6. *CKR*: The ideal entry would be to specify a NewSouth circuit id; provided one has been assigned. You may also choose to enter another identifier that helps determine what type of circuit it is, or who it is being provisioned for
7. *Circuit Description*: Brief yet meaningful circuit description. This will help you find it easily in your work queue. For example: 'NewSouth FX Lines over LAN T1' or 'DS1 for Joe's Bar & Grill'
8. *Circuit Identification*: Unique number of the facility. Unfortunately, TBS doesn't automatically select the next available number for given location(s). Enter as: 00001, 00002, 00003, etc.
9. *Facility Type*: Will automatically be added
10. *Location A and Z*: CLLI code for beginning node (TBS puts these in alphabetical order)

Remarks or Notes tabs

Add information pertinent to the circuit(s), customer, LEC completion date, leased elements or IDs; anything that may help in the provisioning, identification or timely completion of the circuit(s).

Click *OK* to proceed...



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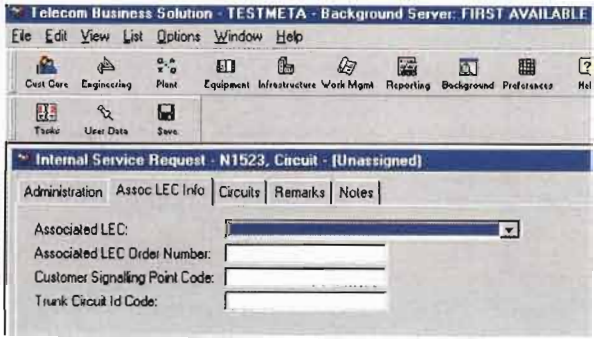

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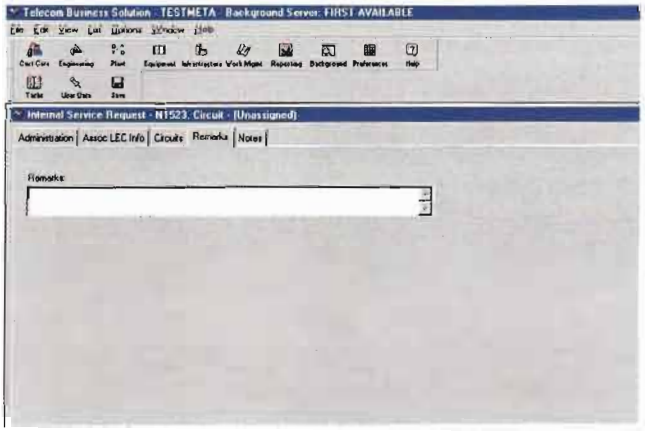

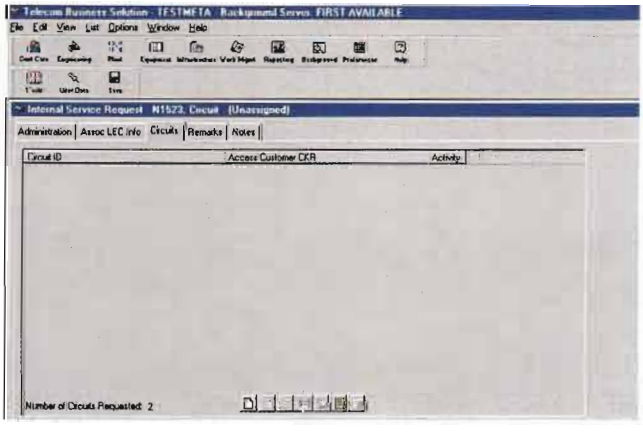

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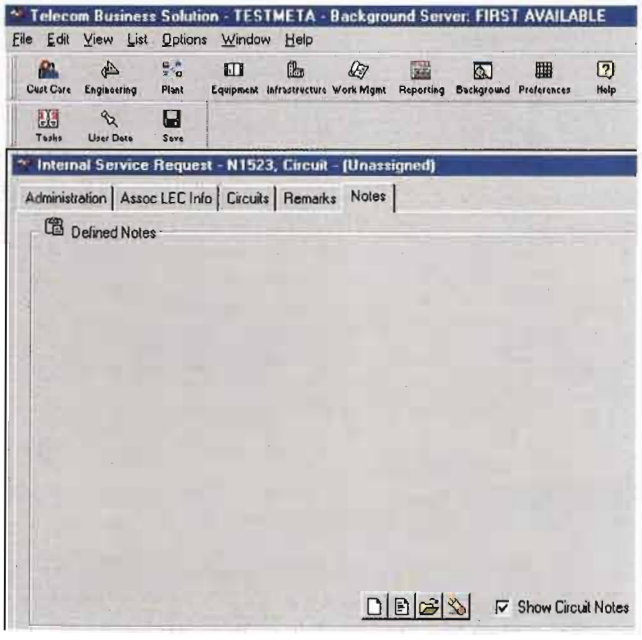
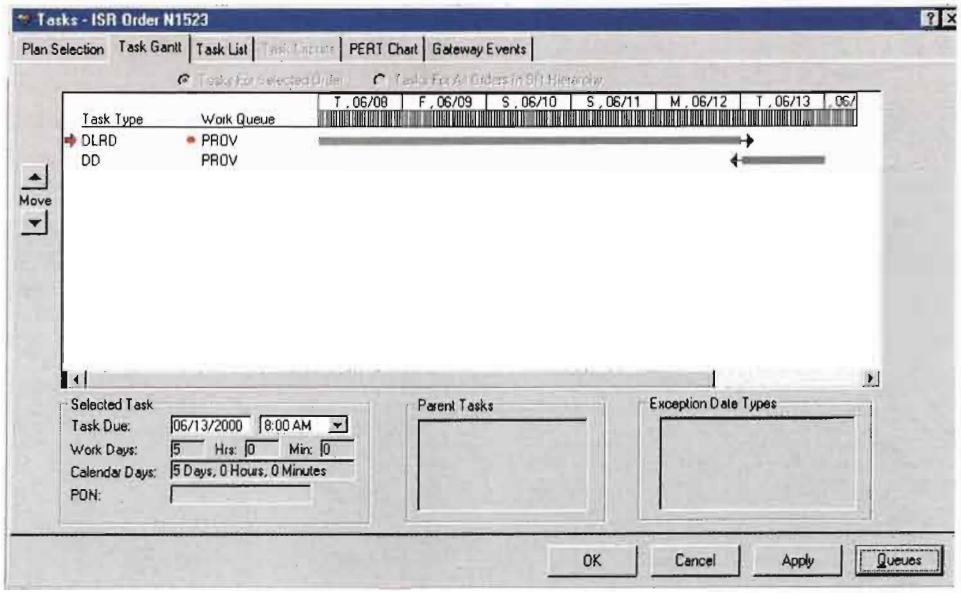


How To Queue a New ISR

Once the new ISR is completed, it is time to queue it in order to begin to build a DLR. Basically this means we associate it with work groups, functions, organizations, milestones and tasks so it may formally enter the service delivery process. From this point forward, the ISR will be forwarded to the correct responsible party, to complete their tasks and, as work is completed, send the order downstream to the next responsible work group. To queue the new ISR:

1. Click on the *Tasks* button
2. In the pull-down box labeled *Provisioning Plan,* select (for existing facilities) *Records Only*
3. Click *Queues*
4. Click *Apply*
5. Click *OK*

The ISR is now in the proper queue and we can start building a DLR!



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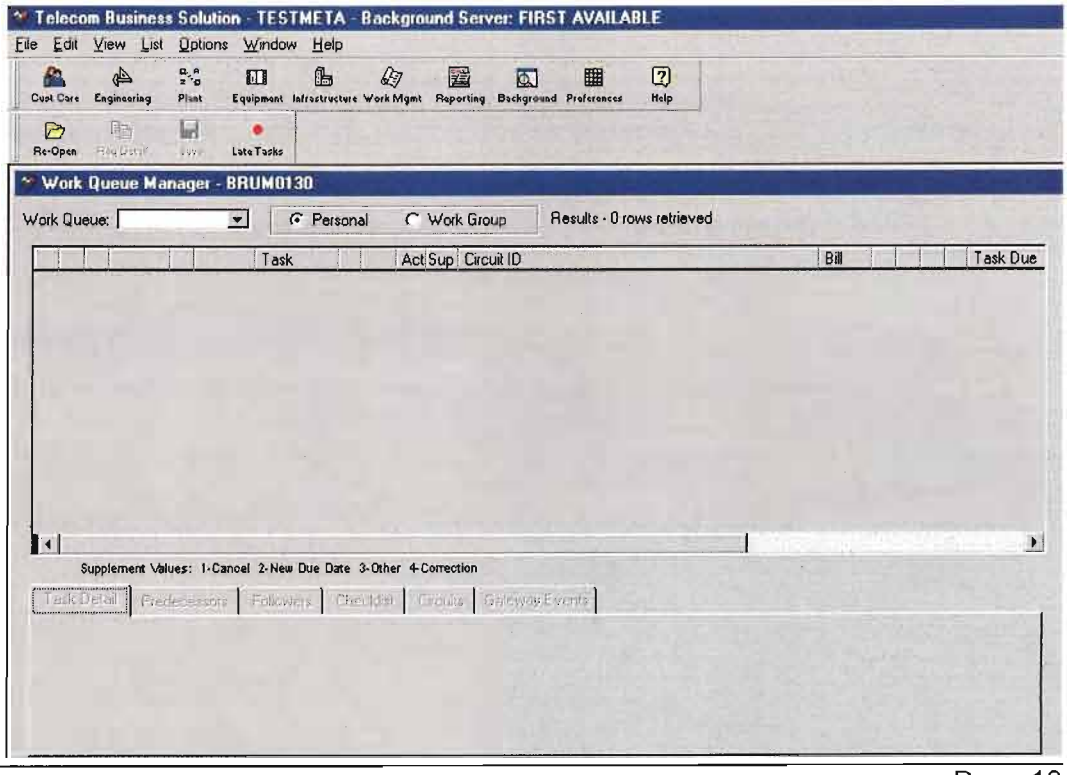
How Do I View My Work Queue?

In order to complete a circuit design/DLR, you must go into your work queue to find the 'DLRD' task. A work queue is simply our In-Box of tasks to be completed. It enables the user to see what's pending, in-process, or in jeopardy. Work queues can be set up as a function/group, or a user/individual. To view your work queue:

1. Login
2. Click on *Work Mgmt*
3. Click on *Queue Mgr*
4. In the *Work Queue* pull-down box, select the desired user/group. (In our case, select PROV)

At this point, line items for any tasks that have been assigned to PROV should appear. Noting the details of each line item, we can tell if an order is new, its status (Ready, Pending, Jeopardy), its circuit id, order number, and due date. We are now ready to begin creating the circuit design/ DLR.



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Creating a DLR

The design layout record (DLR) contains the facility and hardware assignments from the A-to-Z locations for a particular circuit. Included are physical and virtual bandwidth elements, leased and owned facilities, PoP and customer premise equipment hardware assignments, and all relevant notes or comments about a particular circuit. The DLR is typically used by Operations for test and turn-up; NOC personnel for testing and troubleshooting; as well as capacity planning and bandwidth utilization.

To open the DLR:

1. Double-click on the 'DLRD' task
2. Double-click on the circuit to be designed
3. You should see six (6) tabs; *Circuit Detail*, *Administrative*, *Design*, *Design Lines, End User Termination*, and *Notes*.

Many of the fields on the *Circuit Detail* tab will have automatically-imported information about the circuit. On the *Administrative* tab, we'll set up individual preferences so that contact info is automatically entered.

The bulk of information be entered will be on the *Design Lines* tab.

1. Click on *Design Lines*

To add hardware elements:

1. Select *Equipment* and drag over to the open area, or right-mouse and select *Equipment*
2. TBS will automatically open the locations specified in the circuit id by CLLI Code. Select the proper equipment, card, and port to terminate the circuit.
3. Right-mouse on the port, and select *Assign Circuit*. This assignment will be pulled into the DLR.

To add hardware elements:

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To add facilities:

1. 1)Select *Facility* and drag over to the open area, or right-mouse and select *Facility*
2. 2)Enter the circuit id and/or related CLLI codes, check the appropriate boxes in the *Include* section and click *Retrieve*
3. 3)Once the proper facilty is located, double-click on it to open, right-mouse on the proper channel, and select *Assign Circuit*. This assignment will be pulled into the DLR.

To add Foreign Info:

1. Select *Foreign Info* and drag over to the open area, or right-mouse and select *Foreign Info*
2. A blank assignment line item will appear. Add your info here.

Note: *Foreign Info* additions are good for information that may not be in TBS: portions of the LEC's network, leased circuit IDs, notes to the Ops crew, or miscellaneous circuit info.

To complete the DLR:

1. Click on *Save*
2. Click on *Print*
3. If you wish to print the CLR or DLR, check the appropriate boxes.
4. Check *Mark as Record Issued* and *Mark as DLR Issued*
5. Click *OK*, and close the DLR.

Here are some suggestions and general tips for building a DLR:

- Identify and note the line rate, coding, parity
- Verify all handoff and x-connect information
- Verify hardware port assignments
- Verify transport/long-haul level routing
- Draw a picture
- Utilize new infrastructure builds to begin realizing return on capital expenditure
- Use Condition Codes to reserve all assignable ports
- Consider both segment and node constraints when assigning circuits
- Strive for 'balanced' utilization of network

Maintain awareness of network utilization, and notify when critical (70%) capacity levels are met

Completing a Task

Once you've completed the work required for a given task, it's time to close out the task so the next function knows the task is active.

To complete your tasks:

1. In the *Checklist* section near the bottom, check the boxes to show that you have completed the required items.
2. Right-mouse on the task to be completed, and select *Complete Task*
3. Select *Why Missed Codes* where appropriate
4. Click *Yes* to complete

Keep your work queues clean! Your partners downstream don't get notified that their tasks are active until upstream jobs are completed.

In addition, it doesn't take very long for the queues to become cluttered and unmanageable.