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# Core ITIL v3 Process Workflow in IPcenter v3:

## Incident, Problem, Change and Configuration Management

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### User Guide

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# Document Purpose

This document steps you through the following key ITIL v3 aligned management processes as they are addressed by IPcenter v3:

- Incident Management
- Problem Management
- Change Management
- Configuration Management

This document is not intended as an exhaustive manual to every aspect of IPcenter v3, but rather as a guide that will step you through common IPcenter tasks related to incidents, problems, changes, and configuration.

## Definitions

Following are key terms and definitions related to this content:

Term	Definition
Incident	<p>An incident is an unplanned interruption to an IT service or reduction in the quality of an IT service. Examples of Incident categories:</p> <p>Application</p> <ul style="list-style-type: none"> <li>• Service not available</li> <li>• Application bug/query preventing customer work</li> <li>• Disk-usage threshold exceeded</li> </ul> <p>Hardware</p> <ul style="list-style-type: none"> <li>• System down</li> <li>• Automatic alert</li> <li>• Printer issue is preventing customer work</li> <li>• Configuration inaccessible</li> </ul>

Term	Definition
Incident Management	<p>Incident Management involves the activities and practices associated with the detection and resolution of incidents (service disruptions and performance degradations). Incident Management is <i>reactive</i>, initiating only at the occurrence of an incident.</p> <p>The goal of Incident Management is to support and improve the availability and quality of services by restoring normal service operations as quickly and efficiently as possible and minimize the impact of service incidents when they occur.</p>
Problem	<p>Problems are the root cause of incidents. Problems include any condition of the infrastructure or operations that has negative impact (either actual or potential) on service availability or quality. This includes application components, technical infrastructure, processes, methodologies, policies, organization, or any other aspect of the infrastructure or operations on which the availability or quality of services depends.</p> <p>Problems can be reported directly via the Service Desk or from Incident Management to solve an incident ticket.</p>
Problem Management	<p>Problem Management is responsible for the identification and resolution of problems (underlying causes of incidents) whether these problems have already resulted in an incident, or whether they could, but have not yet, resulted in service disruptions or the degradation of service quality.</p> <p>Problem Management is both <i>proactive and reactive</i>.</p>
Change	<p>A change is the addition, modification or elimination of authorized, planned or supporting service (component) and its related documentation.</p>
Change Management	<p>The Process responsible for controlling the Lifecycle of all changes. The primary objective of Change Management is to enable beneficial changes to be made, with minimum disruption to IT services. Change Management is</p>

Term	Definition
	responsible for managing all requests for change from initial entry through implementation, if approved.
Configuration Item	A configuration item is an asset, service component or other item that is (or will be) controlled by configuration management.
Configuration Management	Configuration management ensures that all configuration items that form part of the service or product are identified, provided with a baseline (basic configuration) and maintained.
Workflow	A workflow depicts a sequence of operations, which are the work of one or more person or complex mechanisms.

# About IPcenter v3

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IPcenter v3 is the operational service delivery portal used to manage IPsoft client environments (and the IPsoft environment). It is designed from the ground up to align client business goals with IPsoft's service delivery.

- All operational staff at IPsoft use IPcenter.
- IPcenter is also fully accessible to IPsoft clients and engineers.
- IPsoft employees see all clients, have access to some additional administrative tools, and can develop and execute automata (more detail later).
- Partner engineers see information for all their clients.
- IPsoft clients see **their own information only**.

## Design Tenets

The four key design tenets of IPcenter:

- **ITIL v3 Aligned Service Portal.** The portal is aligned to the key services that comprise your IT operation:
  - Service Design
  - Service Transition
  - Service Operation
  - Service Delivery Management
  - Service Technology
  - Continual Service Improvement
- **Consolidated Framework.** IPcenter is a consolidated toolset designed to encompass all facets of IT operations. It has a central Configuration Management Database (CMDB—more on this to come) that all applications can communicate with. When an individual module refers to a host, each of the applications refers to that host utilizing the same database, so when the monitoring system refers to a host, ticketing (for example) references that same host. This is true across all applications that comprise IPcenter.



- **Systematically enforced processes:** Operational processes are typically enforced by human beings (process managers.) IPcenter has the operational processes embedded within it to drive all core operational activities and capture variances. The system ensures process adherence and execution, including:
  - Six-Sigma Quality Control
  - ITIL v3 Service Operation and Service Transition Activities
    - Incident Management Process
    - Change Management Process
    - Event Management Process
    - Problem Management Process
- **End-to-End Automation:** IPcenter (through IPescalate, IPradar, IPautomata, and other tools) provides a consolidated end-to-end automation framework encompassing Level 1 and Level 2 activities. Even when automation cannot completely remediate a problem, it can support human engineering activities by gathering information.

# Incident Management

## IPim Overview

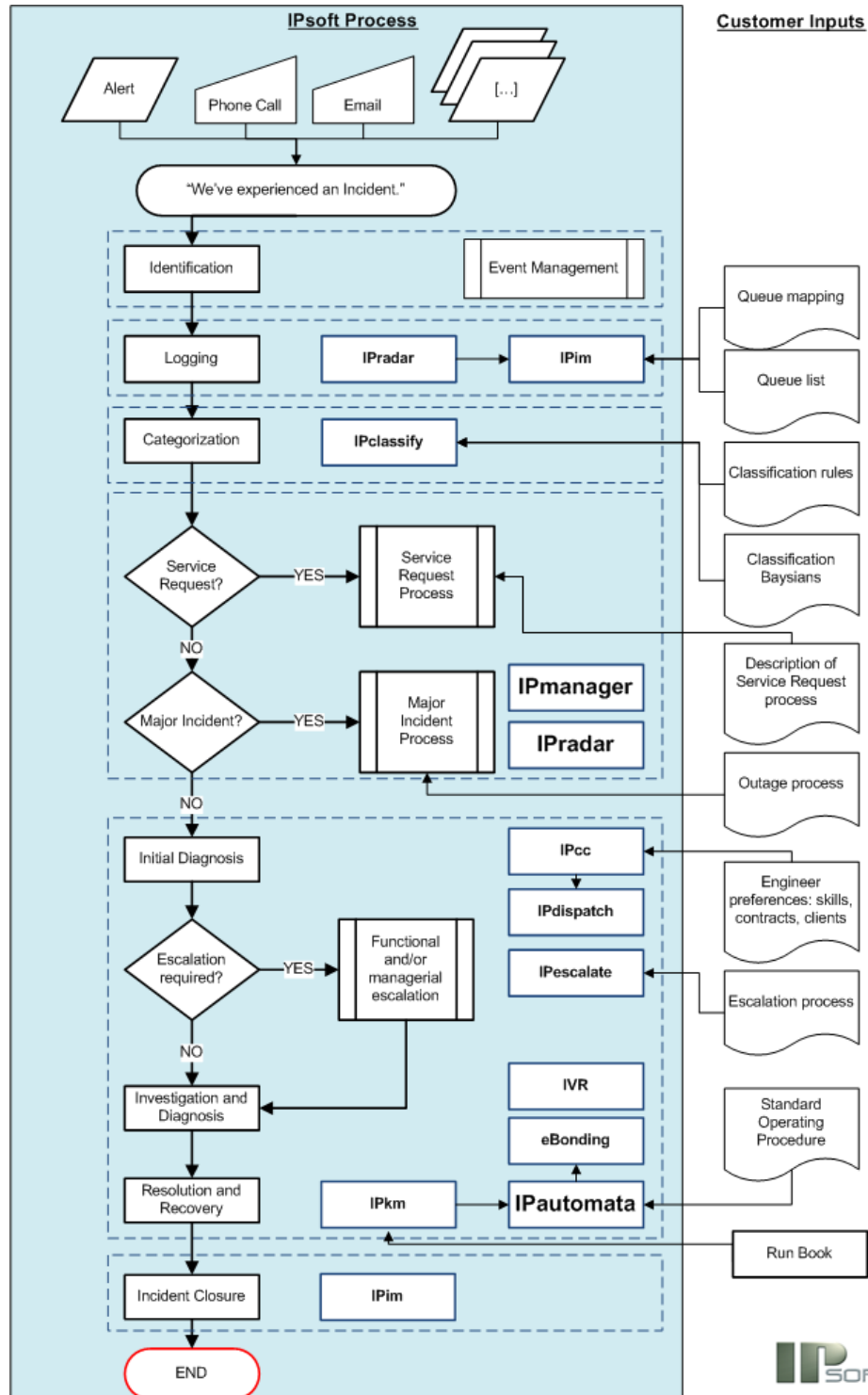
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IPim is IPsoft's Incident Management application. It tracks your incidents through the integrated workflow system, IPradar, ensuring the progression of an incident from inception to satisfactory resolution in the shortest possible time. IPim provides you complete auditability and transparency into the way events in your environment were handled.

IPim—and IPcenter v3 in general—is aligned with ITIL v3 processes.

### **IPcenter v3 and ITIL v3**

The following ITIL v3 workflow diagram outlines how an incident works through to closure. Note the IPcenter v3 modules (blue boxes) related to each step.



Workflow 1: Incident Management

## Incident Management Pre-Requisites

Before incident management can take place, the Service Transition process must be mapped, with the following entered:

- All information about client devices must be under management and entered into IPcmdb
- All known escalation information into IPescalate
- All contact information into IPcontact
- All known communications

## IPradar Overview

IPradar is IPcenter's core workflow system. It encompasses all facets of the operational lifecycle, including Incident Management. IPradar allows you to monitor and pick up tickets of varying criticality.

The screenshot displays the IPradar interface, which is a workflow management system. It is divided into three main sections: Ready Queue, Work Queue, and Operations Queue. Each queue shows a list of tickets with various details including priority, status, and assigned user. The Ready Queue has 72 tickets, the Work Queue has 1081 tickets, and the Operations Queue has 699 tickets. The interface includes navigation tabs at the top for different views and filters, and a search bar on the right.

Queue	Ticket ID	Priority	Status	Assigned To	Created	Updated	Resolved	Comments
Ready Queue (72 tickets)	P3 00:04	CRITICAL	Rev	None	03/24 14:01	03/24 14:05	03/24 14:16	MagPublic_server_1 is CRITICAL **
	P4 00:38	WARNING	Active	nubrama	03/24 14:01	03/24 14:01	03/24 14:16	Grade Instance Invalid
	P2 00:04	WARNING	Rev	None	03/24 14:02	03/24 14:04	03/24 14:17	Exchange HTTP gateway/Multiple Events **
	P2 00:02	WARNING	Rev	None	03/24 14:03	03/24 14:03	03/24 14:18	Lightweight - Cruise Control set up
	P2 00:02	WARNING	Rev	None	03/24 14:03	03/24 14:03	03/24 14:18	External web checks for QuoteFinancial HTTP is **
Work Queue (1081 tickets)	P1 03:29	CRITICAL	Active	None	03/24 14:36	03/24 15:41	03/24 16:30	Host DOWN alert for Router/ T1
	03:31	CRITICAL	Active	None	03/22 10:37	03/24 15:00	03/24 16:30	Schedule run of response time script
	479:04	CRITICAL	Active	None	12/04 23:41	03/23 15:34	03/24 16:31	Test Failover to Business Continuity Environment v2 move - 1529229
	00:36	CRITICAL	Active	None	03/24 15:30	03/24 15:32	03/24 16:32	CHECK: FSD002
	00:24	CRITICAL	Active	None	03/24 15:30	03/24 15:32	03/24 16:32	Test Failover to Business Continuity Environment v2 move - 1529229
Operations Queue (699 tickets)	06:28	CRITICAL	Active	None	03/18 14:19	03/24 13:36	03/24 16:36	OPR Error
	00:35	CRITICAL	Active	None	03/24 15:31	03/24 15:36	03/24 16:36	Production
	03:37	CRITICAL	Active	None	03/24 12:29	03/24 12:37	03/24 16:37	Check performance on DSQL003
	02:24	CRITICAL	Active	None	03/24 10:57	03/24 15:39	03/24 16:38	Urgent: why packets from a bad IP are being sent to SQL server
	07:00	CRITICAL	Active	None	03/17 03:17	03/24 03:24	03/24 16:38	Urgent: why packets from a bad IP are being sent to SQL server

## Open IPradar

1. Login to IPcenter.
2. Hover your mouse over the **Service Operation** tab and click IPradar on the tab row below:



## Navigate IPradar

IPradar has three key ticket queues for specific accounts engineers are managing:

- **Ready Queue:** Every new or attention-requiring task is visible
- **Work Queue:** Tasks actively being worked on by engineers and/or automata
- **Pending Queue:** Tasks pending some activity, including:
  - Pending Close – Awaiting another pass by the monitoring device before closing
  - Pending Vendor – Awaiting vendor action
  - Pending Client – Awaiting client action, like a change request or client permission
  - Pending Event (scheduled Change) – Awaiting for example, a reboot or an available timeframe

## Work with IPradar Queues

IPradar queues are color coded by how long the items have been in queue:

- Green – 0-5 minutes
- Yellow – 10-15 minutes
- Red – 15+ minutes

### Filter Queue Tickets

- You can sort tasks by clicking column headers: Client, Description, Status, Owner, Created (date), Modified (date) and ETA.
- To view an entire queue in another browser window, click **Open** in the queue header:




- At the top of the IPradar interface, search/filter displayed tickets using the buttons (with dropdown choices):
  - Owners
  - Departments
  - Clients
  - IPim Queues
  - Priorities
  - TLkp
  - Saved Views
  - IPmons
- ...and/or by checking checkboxes:
  - Reds
  - Ready
  - Work
  - Ops
  - Pending



### Update Ready Queue

To change a ticket status, click:

-  to pick up a ticket
- **A** to Add details to a ticket
- **R** to Resolve a ticket

### Update Work Queue

The Work Queue can be sorted by: Client, Description, Status, Owner, Created (date), Modified (date) and ETA.

To change a ticket status in the Work Queue, click:

- **U** to Update a ticket
- **A** to Add details to a ticket
- **P** to Pick up a ticket
- **R** to Resolve a ticket

### Update Pending Queue

To change a ticket status in the Pending Queue, click:

- **U** to update a ticket
- **B** to activate ticket
- **R** to Resolve a ticket

### Update Operations Queue

To change a ticket status in the Operations Queue, click:

- **U** to update a ticket
- **R** to Resolve a ticket

### IPradar Columns

- Client
- Number of Correlated Events for this Incident (Event correlation through topology and CMDB relationships are key)
- Description
- Status
- Owner
- Date Created
- Date Modified

- ETA – Defaults to :15
- Related Trouble Ticket (IPim)
- Related Problem Ticket (IPpm)
- Master Monitoring Event Server (IPmon)
- Escalation

## Ticket Status

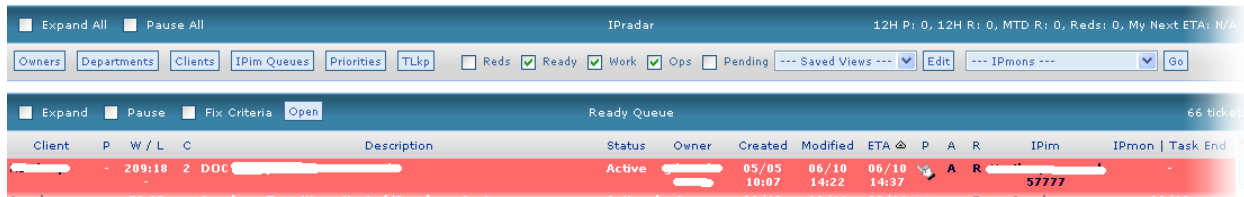
- New – New ticket has been entered in the workflow
  - Action: Pick up ticket within the guaranteed SLA, set proper ETA, and set it for resolution
- Active – IPSoft engineer is working on the ticket
  - An engineer can keep updating the client on progress
- Hand-off – Handing off ticket from one person to another, for instance to an expert or before leaving for the day.
  - At ETA, ticket stays in the Work Queue
- Operations – Moving IPSoft tickets to the Operations queue (internal)
- Pending Client – Assign tickets for which you are awaiting client response (e.g., awaiting info to complete work)
  - Action: Set ETA. When ETA is set and finally arrives, it pops back into the Ready queue with an ETA of 30 minute
- Pending Vendor – Assign tickets for which you are awaiting vendor response
  - Set ETA = Vendor SLA. When ETA is set and finally arrives, it pops back into the Ready queue with an ETA of 30 minutes
- Pending Event – Assign tickets for which you are waiting for a scheduled event to happen
  - Set ETA for event. 30 minutes before the event it will appear live again in the Ready queue with an ETA of 30 minutes
- Pending Close – Assign tickets for which you are awaiting client sign off
  - 24 hours after ETA, the client receives an auto-reminder that a ticket is waiting for closure. If the client does not respond, the ticket is closed after the next 24 hours.
- Resolved




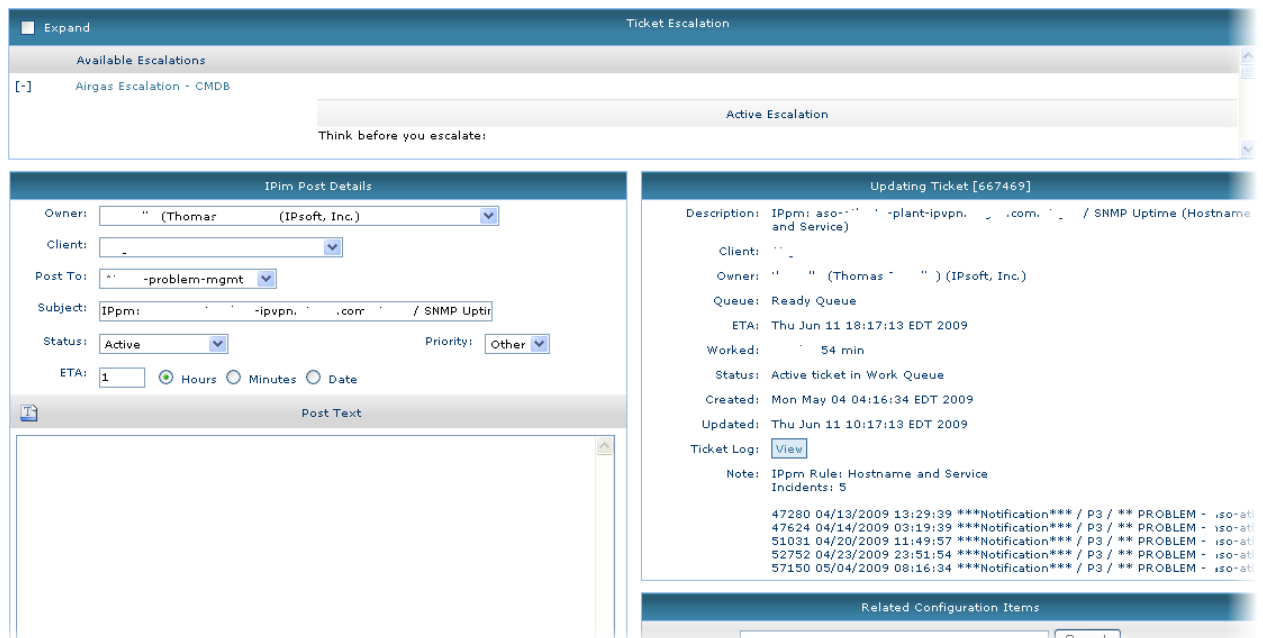
# Picking up a Ticket

This section will step you through the most common aspects of picking up and updating an *incident* ticket in IPcenter.

In IPradar, the most urgent tickets are red near the top of the Ready Queue.



1. Click the pickup hand  of a specific Ready Queue ticket to pick up the ticket. You will see the **IPradar Update** screen, partially show here:



**Note:** Most screen shots in this document have been scrubbed of sensitive content, so some screen content is not visible.

2. In the **IPradar Pickup** window, start by reading from the top: **Ticket Escalation** details (more following). Escalation information can detail responsibility and instructions.

- a. If you sense that you cannot resolve the ticket quickly (in less than 15 minutes), update the ETA in the **IPim Post Details** to allow time to work the issue. More on this in the last section: [IPim Post Details](#).

## Ticket Escalation

In the **Ticket Escalation** section, the workflow engine provides the engineer detailed instructions specific to the issue that has been encountered. These instructions are dynamically generated by the system based on how it has classified and categorized the task.

Expand		Ticket Escalation
Available Escalations		
[+]	Escalation - CMDB	
[+]	Hand-Off Update	Hand-Off update stamp will add necessary info to ticket at hand-off time.
[+]	MID Escalation	

Instructions might highlight, for example:

- Key pieces of “tribal knowledge” specific to the customer that the engineer should be aware of for this task
- Customer- and task-specific escalation, communication and business processes, including contact and escalation points.

## Updating Ticket

On the upper-right of the **IPradar Pickup** screen you will find original ticket details:

Updating Ticket [667469]

Description: IPpm: aso-atlanta-plant-ipvpr. .com. / SNMP Uptime (Hostname and Service)

Client:

Owner: (Thomas ) (IPsoft, Inc.)

Queue: Ready Queue

ETA: Thu Jun 11 18:17:13 EDT 2009

Worked: 887 hr, 28 min

Status: Active ticket in Work Queue

Created: Mon May 04 04:16:34 EDT 2009

Updated: Thu Jun 11 10:17:13 EDT 2009

Ticket Log: [View](#)

Note: IPpm Rule: Hostname and Service  
Incidents: 5

47280 04/13/2009 13:29:39 \*\*\*Notification\*\*\* / P3 / \*\* PROBLEM - aso-atl:  
47624 04/14/2009 03:19:39 \*\*\*Notification\*\*\* / P3 / \*\* PROBLEM - aso-atl:  
51031 04/20/2009 11:49:57 \*\*\*Notification\*\*\* / P3 / \*\* PROBLEM - aso-atl:  
52752 04/23/2009 23:51:54 \*\*\*Notification\*\*\* / P3 / \*\* PROBLEM - aso-atl:  
57150 05/04/2009 08:16:34 \*\*\*Notification\*\*\* / P3 / \*\* PROBLEM - aso-atl:

## Ticket Log

- Next to **Ticket Log**: click [View](#) to review the ticket history (when, what, who, ETA, etc.):

Ticket Log - Radar Ticket ID: 667469   IPim Ticket ID: 73952									
Date	Ticket	Type	Description/Value	Actor	Notes	Prev Queue	Prev Status	Prev Owner	Prev ETA
05/04/2009 04:16 EDT	667469	NEW TICKET	Insert New IPpm Ticket			Work Queue	Active	mghicas	05/07/2009 04:16 EDT
05/06/2009 09:53	667469	UPDATE	Update Ticket Details	brookshla (Vande		Work Queue	Active	mghicas	05/07/2009 04:16 EDT

## Related IPmon Alert

In the middle-right of the **IPradar Pickup** window is the **Related IPmon Alert** section. If the source of the ticket is an IPmon alert, the button next to **Hostname** will open the original IPmon alert details. Also, you can see the last known **State** for that Monitoring Alert (in this example: DOWN).

Related IPmon Alert [Last Known State]

Description: Host DOWN alert for

Alert Type: Host

Notification Type: PROBLEM

Hostname:

Host Alias: ....

Address: 2.77.1.1

State: DOWN

Date: Mon Jun 15 14:14:45 EDT 2009

Additional Info:

IPmon is the IPsoft monitoring, embedded intelligence, system and network management software. It allows you to monitor network services and host resources and to develop service checks.

### Correlated Tickets

Notice the **Correlated Ticket** section in the middle-right part of the **IPradar Pickup** screen. Besides viewing correlated ticket details, you can:

- View Correlated tickets
- Manually correlate tickets
- Make Master
- Decorrelate tickets

1 Correlated Ticket (Source: 0 Host Alerts, 1 Service Alert, 0 IPim, 0 Other)

☒ Expand ☐ Refresh

	State	Last
<div><div>[-]</div><div>***Notification*** / P3 / ** PROBLEM - - ita-plant- ipvpn. .com. - - 831/SNMP Uptime is WARNING **</div></div>	<span>OK</span>	06/09 12:08

View

Make Master (N/A)

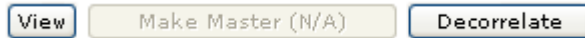
Decorrelate

-- Select One --

Add

## View Correlated Ticket

- First, you can click the **Expand** checkbox[+] next to the correlated ticket you are interested in. Notice available buttons like these:



- Click **View** (below the listed correlations) to see a full screen of correlation detail (partial screen shown):

Correlated Ticket

You are viewing a correlated ticket.

[View Master](#) [Close](#)

Master Radar Ticket

Description	Alert State	Correlated
IPpm: plant-ipvpn. .com. / SNMP Uptime (Hostname and Service)	-	

IPAutomata

Available Automata [Create New](#)

[+] Generic site contact escalation	<a href="#">Edit</a>
[+] Schedule downtime	<a href="#">Edit</a>
[+] Similar tickets lookup	<a href="#">Edit</a>

Matching Automata Classes/Templates

None

Automata Executions for Ticket

Name	Date	Creator	Status
[+] Auto notifier client	06/09 11:5		<span>Succes</span>

Execution Complete

Execution History [View as Text](#)

+ / -	Name	Run Time	Status
[+]	Link	06/09 11:58:45 COMPLETE - 06/09 12:26:06	
[+]	Welcome to	06/09 11:58:45 COMPLETE	

Updating Ticket [702864]

Description: \*\*\*Notification\*\*\* / P3 / \*\* PROBLEM - 831/SNMP Uptime is WARNING \*\*

Client:

Owner: (Thomas ) (IPsoft, Inc.)

Queue: Ready Queue

ETA: Thu Jun 11 18:17:13 EDT 2009

Worked: 54 hr, 56 min

Status: Active ticket in Work Queue

Created: Tue Jun 09 11:58:43 EDT 2009

Updated: Tue Jun 09 14:27:48 EDT 2009

Ticket Log: [View](#)

Note: -- IPmon Alert --  
Description: \*\* PROBLEM - -atlanta-plant-ipvpn .com. - 831/SNMP Uptime  
Alert Type: Service  
Notification Type: PROBLEM  
Service: SNMP Uptime  
Hostname: -plant-ipvpn.  
Host Alias: -plant-ipvpn.  
Address: 10.48.136.1 - 831  
State: WARNING  
Attribute: criticality=P3  
Attribute: default\_ipim\_queue=  
Additional Info:  
  
WARNING: SNMP Uptime: 0 days 0 hours 10 minutes 9 seconds (warning threshold: 20 mi  
Date/Time: Tue Jun 09 15:58:43 UTC 2009  
IPmonHost: IPmon01-

Related Configuration Items

Device	Site	Contacts
--------	------	----------

## Manually Correlate Ticket

- Select a ticket in the dropdown and click **Add**.

## Make Master Ticket

- If the **Make Master** button is available, click it to make this incident ticket the master ticket to which other incident tickets are associated.

## Decorrelate Ticket

- Click **Decorrelate** (below the listed correlations) to detach the correlated ticket from this master ticket.

## Automate

On the left-side of the screen in the **IPautomata** section, you can view available software agents, which facilitate data gathering, management, and remediation of detected issues:

IPautomata	
Available Automata	Create New
[+] Generic site contact escalation	Edit
[+] Schedule downtime	Edit
[+] Similar tickets lookup	Edit

1. Expand one of the available automata:

[-] Generic site contact escalation

Edit

Automaton Notes

Needs a contact name, contact phone number, and e-mail address to start a fairly long 48h execution. At trigger, the automata will deliver an email and a phone call alerting the site contact that we have an open ticket that requires their assistance. At 12 hours from initial trigger the ticket will be updated that no response has been received and the automata will deliver a follow-up email and phone call. At 24, 30, 36, 40, and 48 hours from initial trigger the ticket will be updated that no response has been received and the automata will deliver a follow-up email and phone call. At the 48 hour mark, the ticket will be updated that 48 hours of effort have failed to reach the contact and an escalation contact should be acquired.

Initial State

Linked To

Link

COMPONENT: Site contact escalation

Runtime Variables

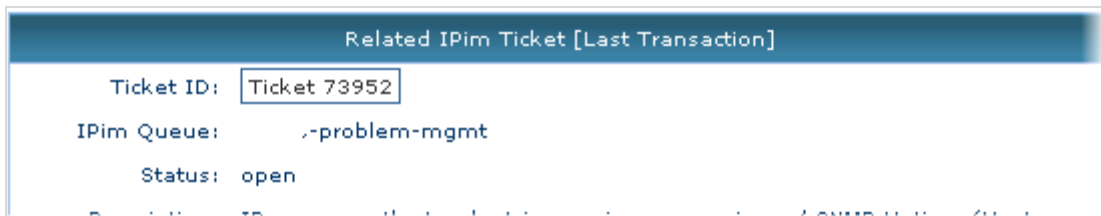
Name	Value	Notes
callback_number	<input type="text"/>	Your callback number. If you leave it blank, IPautomata will use default hotline number.
contact_email	<input type="text"/>	Who do you want to escalate this ticket to? Valid email!

2. You can optionally **Edit** (upper-right) the automaton or  (bottom) it.

## Related IPim Ticket

1. Back on the right-side of the **IPradar Pickup** screen, notice the **Related IPim Ticket** section.
2. Note IPim details (IPim Queue, Status, etc.) and click the Ticket # button next to **Ticket ID:** to open the ticket in a separate IPim window. IPim contains a full record

of every action taken on the ticket.



Related IPim Ticket [Last Transaction]

Ticket ID: Ticket 73952

IPim Queue: .-problem-mgmt

Status: open

3. You can filter the ticket information with the following:



Ticket History # 73952 IPpm: plant-ipvpn.com. / SNMP Uptime (Hostname and Service)

Display History Basics Dates People Jumbo Steal Comment Reply Resolve Subscribe Unsubscribe ☆

### Adjust notification emails

You can update your email notifications (receive more or less) in one or more of the following ways:

1. Update your queue subscriptions
2. Subscribe or Unsubscribe to a ticket's email notifications
3. Bookmark the ticket



IPim

IPim Navigation

Home

Simple Search

Tickets

#63948: test

Display History Basics Dates People Jumbo Steal Comment Reply Resolve Subscribe Unsubscribe ☆

### Subscribe to a ticket

If you're not a watcher or on a Cc: list for a ticket and want to see it without email notifications, subscribe to the ticket as follows:

1. Click **Subscribe** in the IPim ticket menu bar (gray).
2. You will see an update in yellow noting that you have been added, below which you will see ticket information (metadata).

#63948: test

Display History Basics Dates People Jumbo Steal Comment Reply Resolve Subscribe Unsubscribe ☆

**Results**

- Added principal as a AdminCc for this ticket

**New messages**

There are unread messages on this ticket. You can jump to the first unread message or jump to the first unread message and mark all messages as seen.

**Ticket metadata**

The Basics	Dates
Id: 63948	Created: Mon May 18 13:28:54 2009
Status: open	Starts: Not set
Priority: 0/0	Started: Mon May 18 13:29:57 2009
Queue: IPsoft-Testing	Last Contact: Not set
	Due: Not set
	Closed: Mon May 18 13:29:57 2009

**People**

### Unsubscribe to a ticket

Unsubscribe to a ticket by clicking **Unsubscribe** in the IPim ticket menu bar (gray). You will see an update in yellow noting that you are no longer Cc: or AdminCc: for the ticket.

#63948: test

Display History Basics Dates People Jumbo Steal Comment Reply Resolve Subscribe Unsubscribe ☆

**Results**

- ipsoft-qa is no longer a AdminCc for this ticket.

**New messages**

There are unread messages on this ticket. You can jump to the first unread message or jump to the first unread message and mark all messages as seen.

**Ticket metadata**

The Basics	Dates
Id: 63948	Created: Mon May 18 13:28:54 2009
Status: open	Starts: Not set

### Bookmark a Ticket

If you would like to watch a ticket *without receiving email updates*, bookmark the ticket as follows:

1. Click the star icon in the ticket tool bar.

#63948: test

Display History Basics Dates People Jumbo Steal Comment Reply Resolve Subscribe Unsubscribe ☆

2. Clicking the star turns it gold and, when you refresh your browser (note that this screen is static--refresh does not happen automatically), you will see the ticket



under **Bookmarked Tickets:**

IPim

**IPim Navigation**

- Home
- Simple Search
- Tickets

**IPim Workspace**

**10 highest priority tickets I own** Edit

**Bookmarked Tickets** Edit

#	Subject	Priority	Queue	Status
91970	TEST	0	-general	resolved

## IPcc – Internal Escalation

If you need help with the ticket, IPcc (lower-left of the **IPradar Pickup** screen) allows you to find the appropriate contact for internal escalation. Based on parameters you select, the system will generate an order list of escalation points utilizing available contact details.

The system can automatically contact the engineers:

1. Refine the ordered Dispatch List as needed by specifying Client, Department, and Skills.
2. To send the escalation, select a **Criticality** (P1, P2, P3, P4), a **Type** (Red Notification, Hand-off Request, Call-back Request) and click **Dispatch**.

**Important Note:** Before dispatching, you should first call/contact the escalation contact(s) to let them know a ticket is being dispatched.

**IPcc Internal Escalation**

Client:

Department:

Skills: (Up to 3)

Criticality:  Type:

**Ordered Dispatch List at Thu Jun 11 21:49:08 UTC 2009**

[ + ]	Work Phone	(212) 70
[ + ]	IRC Handle	
[ + ]	AIM Handle	
[ + ]	Home Phone	
[ + ]	Cell Phone	(212) 852
[ + ]	AIM Handle	soft

## IPim Post Details

On the upper-left of the **IPradar Pickup** screen, notice the **IPim Post Details** section. Engineers use this interface to update tickets. Note that the system requires the engineer to set an ETA for every update by minutes, hours or an exact date.

### Update Newly Opened Ticket

1. If you have just opened a ticket and decide that you cannot complete it within a few minutes, update the ETA to a number of Hours, Minutes or to a Date:



ETA:  ☒ Hours ☐ Minutes ☐ Date

- a. This will insert the ticket into the Work queue as a green item ordered according to priority.
2. Optionally you can change:
    - a. **Post To** (if you want to switch queue)
    - b. **Priority**
    - c. **Status**, etc.
  3. Include comments in the **Post Text** box before you click **Update Ticket**.

### Detail Existing Ticket You Have Updated

4. If you have worked the ticket, fill out Post Details (including Post Text) as a *final* step—include any relevant details.

# Problem Management

## IPpm Overview

---

IPpm, IPcenter's problem management process, is responsible for managing the complete lifecycle of all problems. IPpm is engineered to:

- Prevent the problem from happening
- Eliminate recurring incidents
- Minimize the impact of incidents

IPpm can automatically detect and flag trends in incidents by interacting with IPim, IPmon and other event management modules.

IPpm—and IPcenter v3 in general—is aligned with ITIL v3 processes.

### IPpm Tasks

In general, IPpm performs two tasks:

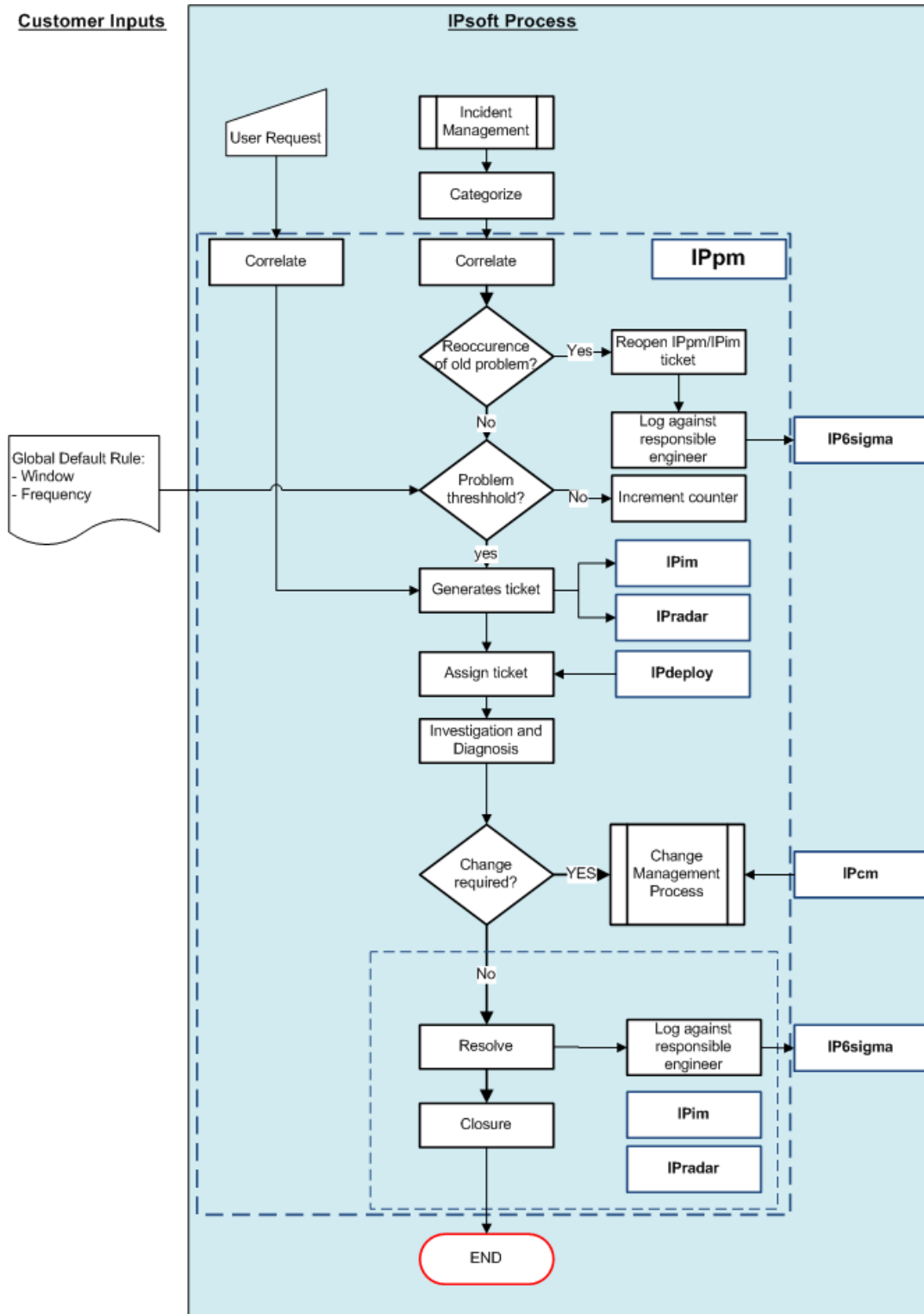
- Allows users to create, search, and update problems
- Listens for ticket events

For each event, the configured IPpm rules are applied to the incident and, if the rule matches, an associated problem is created or updated.

### Process Model

The following ITIL v3 workflow diagram shows in more detail how a problem works through to closure. Note the IPcenter v3 modules (blue boxes) related to each step:

Customer Inputs



Workflow 2: Problem Management

# Using IPpm

## Navigating IPpm

1. To open IPpm, hover your mouse over the IPcenter **Service Operation** tab and click **IPpm** in the row of tabs that appears below.



2. The IPpm page opens by default to **Problem Search**, detailed in the next section. Note the three tabs below the IPcenter menu (more on each follows):

- Problem Search
- Create Problem
- Problem Rules



## IPpm Permissions

**Note:** You can be granted one of these permission roles in IPpm:

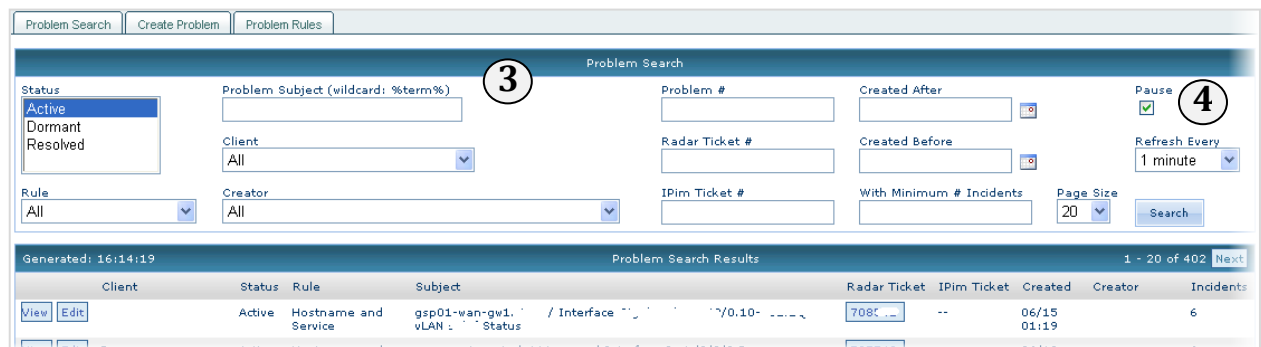
- View – Read-only view of IPpm. Client access. It provides access to problem search and problem viewing in IPpm.
- Update – Create and update a problem in IPpm. IPsoft user access.

## Problem Search

The **Problem Search** page allows you to search for an existing problem based on optional search criteria:

3. Enter search criteria:
  - a. Status – Active (default), Dormant, Resolved
  - b. Rule – Shows those created in the **Problem Rules** tab (more follows)

- c. Problem Subject – You can search using % as a wildcard
  - d. Client
  - e. Creator
  - f. Problem #
  - g. Radar Ticket #
  - h. IPim Ticket #
  - i. Crated After
  - j. Created Before
  - k. With Minimum # of Incidents
4. You also can customize how often search results are refreshed on the page:
    - a. Pause – No refresh when you check this
    - b. Refresh Every – Never, 30 seconds, 1 minute, 5 minutes, 10 minutes, 30 minutes, 1 hour



5. Click

Search

## Problem Search Results

The problems are returned in descending order by Problem ID. Due to the number of dormant problems in the system, sorting by additional fields is not supported at this time.

**Note:** When you open the Problem Search page, you automatically will see **Problem Search** results, which default display Active problems.

## View Problem

1. In the **Problem Search** page **Problem Search Results** section, click [View](#) to see details of a specific problem, including associated IPradar tickets (which you can click for further detail):

Problem Details - #7868

Client: Manufacturing  
 Hash: c732e3ae  
 Radar Ticket: [704738](#) Active / Work Queue / mghicas (Mike)  
 IPim Ticket: None  
 Rule: [Hostname and Service](#)  
 Status: Active  
 Subject: h -g-22- anufacturing / Env Temperature  
 Description:  
 Threshold: 5  
 Time Period: 90 Days  
 Created: 06/02/2009 14:11:45  
 Modified: 06/15/2009 14:08:32

Incidents:	IPradar	IPim	Subject	Associated By	Association Date
<a href="#">596925</a> Resolved	<a href="#">70688</a>	Manufacturing-general	** PROBLEM - ...cturing - 6506/ ... Env Temperature is	Automatic	06/02/2009 14:11
<a href="#">597810</a> Resolved	<a href="#">71155</a>	Manufacturing-general	** PROBLEM - ...cturing - 6506/ ... Env Temperature is	Automatic	06/03/2009 14:43
<a href="#">597810</a> Resolved	<a href="#">71155</a>	Manufacturing-general	***Notification*** / P3 / ** PROBLEM - ...cturing -	Automatic	06/03/2009 14:43

## Create Problem

There are two sources of problems in IPpm:

- Manually created problems
- Auto-created problems

To create a new problem (manually created), follow these steps.

1. Click the IPpm **Create Problem** tab.

[Problem Search](#)
[Create Problem](#)
[Problem Rules](#)

## Enter Manual Problem Details

2. Enter problem detail:
  - a. Client – Client with the problem
  - b. Creator – User who created the problem (read-only)
  - c. Status – Status of the problem (read-only)
  - d. Subject – User chosen subject
  - e. Description – Description of the problem
  - f. Created – Date the problem was created (read-only)

- g. Modified – Date the problem was last modified (read-only)
- h. Incidents – Manually associated IPim incidents

### Manually versus Auto-Created Problems

Depending on the source of the problem, the editable (and displayed) fields differ slightly.

### Auto-Created Problem

The following fields display for an auto-created problem:

- Client – Client with the problem (read-only)
- Hash – Hash of the value of the "group by" fields - this hash plus the associated rule make the problem unique (read-only)
- Rule – Link to the rule that generated this problem (read-only)
- Radar Ticket – Link to the IPradar ticket associated with the problem (read-only)
- IPim Ticket – Link to the IPim ticket associated with the problem (read-only)
- Status – Status of the problem
- Subject – Auto-generated subject
- Description – User editable description
- Threshold – Threshold for this problem; copied from the rule definition when the problem is first created
- Time Period Days – Time period copied from the rule definition when the problem is first created
- Created – Date the problem was created (read-only)
- Modified – Date the problem was last modified (read-only)
- Incident – Auto-associated IPim incidents. Additional incidents can be manually associated.

## Problem Rules

### What are Problem Rules?

Problem rules define how a collection of incidents graduate to a problem. Each rule has the following parameters:



- Name: A unique name for the rule. Should be relatively short.
- Description: A longer description of the rule, its intent, etc.
- Default Threshold: The number of incident that must match this rule before a problem becomes Active.
  - **Note:** Any changes you make to the threshold will not be reflecting in existing problems (including dormant problems).
- Default Time Period in Days: The threshold must be exceeded within this many days. This is also copied to the problem upon creation.
- Default ETA in Minutes: The initial ETA of the radar ticket when a problem transitions from Dormant to Active.
- Conditional Expression: Javascript expression. If the values returns false for a given incident the rule will not apply. Think of this as the "where" clause in a SQL statement.
  - Example: `ticket.getIpmonTicketMapping().getSubservice() == ""`
- Group By Fields: The fields from an IPradar ticket that group incidents together.
- Disabled: Rule cannot be deleted, but:
  - 'false' means the rule is currently active and will run
  - 'true' means the rule is currently inactive and will not run

## Create New Problem Rule

To create a new Problem Rule, follow these steps.

1. Click the IPpm **Problem Rules** tab.



2. Click  in the upper-right of the **IPpm Rules** page.

3. In the **Add Rule** page, fill out the required \* fields and, if desired, optional fields (all detailed in the preceding section):

**Add Rule**

Name: \*

Description: \*

Default Threshold: \*

Default Time Period in Days: \*

Default ETA in Minutes: \*

Conditional Expression:

Group By Fields: \* 

Address  
Host  
Hostname  
Service

Disabled: ☐

4. Click **Submit Rule** to add the new rule.

## Edit Problem Rule

1. In the **IPpm Rules** page (or in the **Problem Search** page **Problem Search Results**), click **Edit** in the row of the problem rule you want to edit.

Name	Description	Group By Fields	View	Edit
Hostname and Service	Same hostname and serv...	Service, Hostname	<input type="button" value="View"/>	<input type="button" value="Edit"/>
Hostname, Service, and Subservice	Does not hostname, serv...	Service, Subservice, Hostname	<input type="button" value="View"/>	<input type="button" value="Edit"/>

2. Edit one or more fields and click **Update Rule** to make the changes.

## How IPpm Tickets Populate IPradar

This section details how IPpm tickets interact with IPradar. IPpm injects tickets into the IPradar **Work Queue** when:

- A manual problem is created
- A problem exceeds its threshold—automatically transitions from Dormant to Active
- A problem re-exceeds its threshold—automatically transitions from Resolved to Active

### How Ticket ETA is Set

The ETA of the radar ticket is set as follows:

- If the problem exceeded its threshold for the first time—ETA is set based on the ETA of the problem rule
- If the problem has re-occurred (exceeded its threshold)—ETA is 24 hours
- If the problem was manually created—ETA is 48 hours

### How Ticket Ownership is Set

The ownership of the radar ticket is set as follows:

- If the problem is manually created—creator of the problem is set as the owner
- If the problem has re-occurred—owner does not change (remains the last owner of the ticket).
- If the problem exceed its threshold for the first time—ownership is set based on the following rules (first owner found wins):
  - A technical lead for the client in the department whose members owned the most associated incidents
  - The technical executive for the client
  - The department head whose department owned the most associated incidents
  - A globally-configured fallback user for the entire IPcenter install. Typically head of operations or the department head for domain focused environments

# Change Management

## IPcm Overview

---

IPcm is the IPcenter v3 change management engine. IPcm is designed to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes. All changes to service assets and configuration items are recorded in IPcmdb, and all actions associated with changes are logged in IPim tickets for transparency to the end-user.

IPcm—and IPcenter v3 in general—is aligned with ITIL v3 processes.

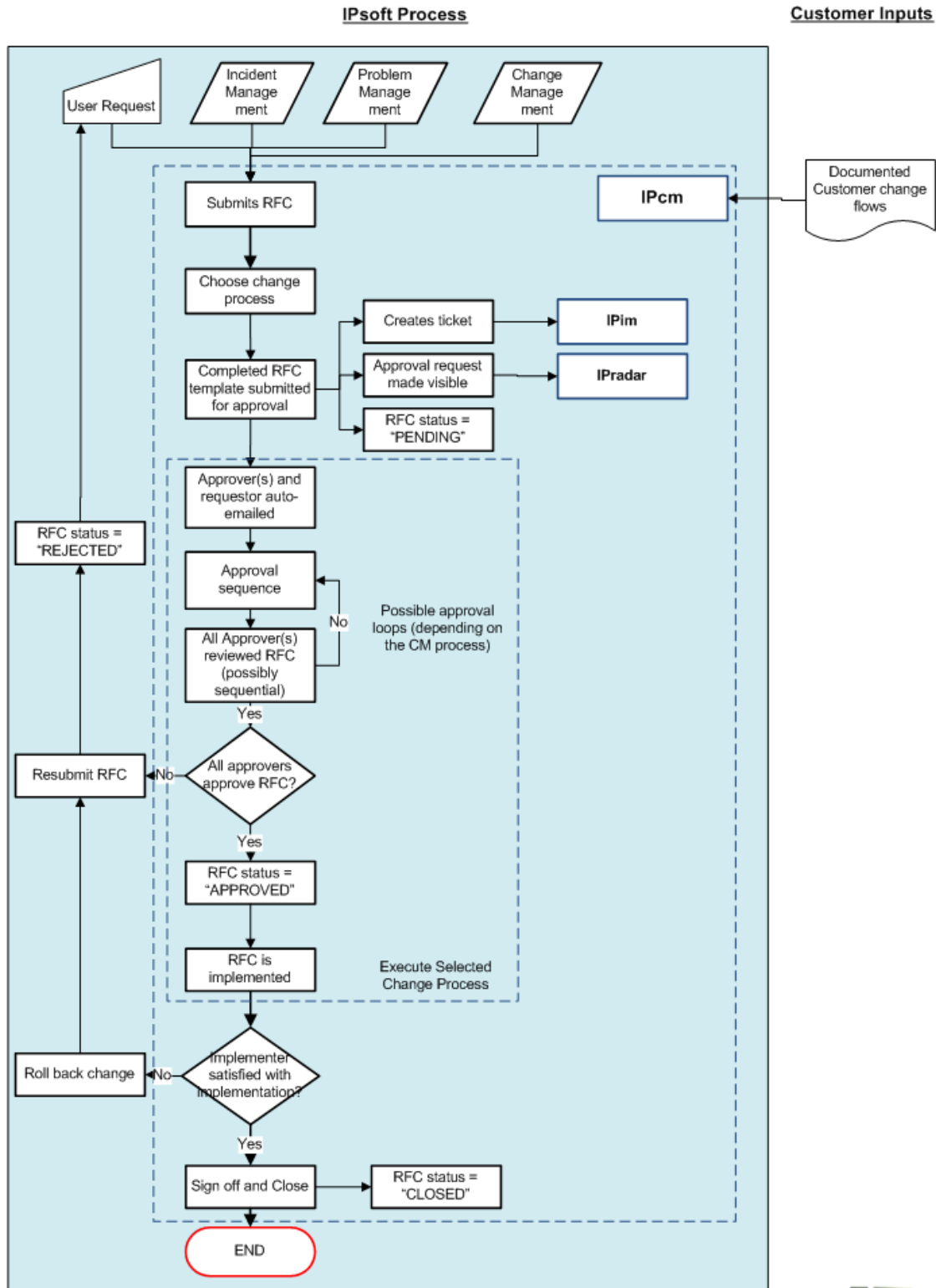
### Section Content

This section is divided into two parts:

- How to Create a Change
- How to Create a Change Workflow

### Process Model

For the purposes of this section, focus on the left half of the following ITIL flowchart: Change Management. The diagram outlines how a change request interacts with Configuration Management (following section) and progresses to closure. Note the IPcenter v3 modules (blue boxes) related to each step.



Workflow 3: Change Management with Configuration Management

# How to Create a Change

In order to complete a change request, the request for change must complete a workflow in which the change is created, approved, implemented, reviewed and closed.

In this section of the document, you can step through the IPcm workflow. An “ITIL process” note in each phase will keep the related ITIL framework in perspective.

## Open IPcm

1. In IPcenter, hover your mouse over the **Service Operation** tab and click **IPcm** in the row of tabs that appears below.



2. The IPcm page opens by default to **IPcm Search**, which allows you to:
  - a. Create a new Request for Change (RFC)
  - b. Search for an existing Change
  - c. View your RFCs

A screenshot of the IPcm Search page in the IPcenter application. The page has a top navigation bar with tabs: 'Home', 'Service Design', 'Service Transition', 'Service Operation', 'Continual Service Improvement', 'Service Delivery Management', and 'Service Technology'. Below this is a sub-navigation bar with tabs: 'IPcm Search', 'Create', 'Approve', 'Implement', 'Review', 'Workflows', 'Designer', and 'Help'. The 'IPcm Search' tab is selected. The main content area is divided into three sections:

- (a) New Request for Change**: A section with a 'Workflow' dropdown menu set to '-- Select One --', and 'Create' and 'View' buttons.
- (b) Request for Change Search**: A section titled 'Applicable Filters' with three input fields: 'Name (wildcard: %term%):', 'Status:' (set to '-- All --'), and 'Client:' (set to 'abcd'). There are 'Search' and 'Reset' buttons below these fields.
- (c) Requests for Change 0 - 0 of 0**: A table with columns: Name, ID, Status, Priority, Category, Workflow, and Client. The table is currently empty.

Note the eight tabs below the IPcenter menu:

- IPcm Search
- Create – Create RFC
- Approve – Approve RFC
- Implement – Implement RFC
- Review – Review RFC and close if ok
- Workflows – View workflows associated with a client
- Designer – Design a custom RFC


### IPcm Permissions

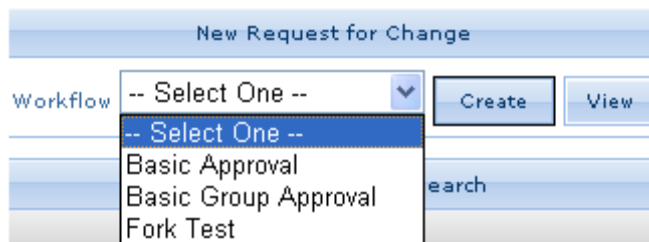
You can have either View or Edit rights to the IPcm content. You must have edit rights to perform some or all of the actions required to create a change (following).

## Create a Change Request

### Details Section

1. Select one of the Workflows available to you and click .

**NOTE:** You can select a Workflow and click  to ensure it is appropriate for your change.



2. **Name:** Enter a workflow Name (for our example: Change Walk Through). This is the only required field.
3. **Client:** Client name should automatically be picked

4. **Workflow:** Displays the workflow you selected.
5. **Status:** Shows **DRAFT** until you have completed this **Create** step (through step 6 following).

New Request for Change

Details

Name: Change Walk Through ②

Client: IPsoft, Inc. ③

Workflow: Basic Approval

Status: DRAFT

Initiator: pwillcox (Philip Willcox)

Created: Tue May 12 11:28:28 EDT 2009

Updated: Tue May 12 11:28:28 EDT 2009

Assessment

## Assessment Section

Below the **Details** section, the optional **Assessment** section allows you to add your assessment details of the RFC.

While most of the boxes are self-explanatory (see descriptions next to each one), a few require explanation:

1. **Priority:** LOW, NORMAL, HIGH, URGENT
2. **Category:** MARGINAL, SUBSTANTIAL, CRITICAL
3. **Planned Start / End Date:** Always enter these dates.  
**NOTE:** IPradar incorporates your Start Date.
4. **Backout Strategy:** Enter general backout strategy for lower risk / lower priority changes
5. **Rollback Procedure:** Enter a detailed step-by-step procedure for rolling back higher risk/priority changes



6. Once you have entered desired details, click [Create](#) (bottom of page) and click at the prompt click **OK**.

7. You now see your created RFC. If this is an action item, you can either:

- a. Click **Edit** – Edit your entries *OR*

**Note:** You can click RFC Change Log [View](#) to see details of your edits.

- b. Click **Submit for Approval** – Submits the change to the **Approve** queue (after you click **OK** to confirm that you want to submit).

## 8. Submitting inserts the RFC into:

- a. IPim - Creates an IPim ticket in the queue the workflow is assigned to (usually <Client>-change) to facilitate conversation about the request.

Includes a History section to which you can **Reply, Comment, Forward**:

#12588: Request for Change: Change Walk Through
Display History Basics Dates People Jumbo Comment Reply Resolve Subscribe Unsubscribe ☆

Ticket metadata

**The Basics**
Id: 12588  
Status: open  
Priority: 0/0  
Queue: IPsoft-change

**Dates**
Created: Tue May 12 11:41:59 2009  
Starts: Not set  
Started: Tue May 12 11:41:59 2009  
Last Contact: Not set  
Due: Not set  
Closed: Not set  
Updated: Tue May 12 11:42:01 2009 by pwillcox (philip.willcox@ip-soft.com) - Philip Willcox (IPsoft)

**Custom Fields**
Globally Available Ticket Custom Field: (no value)  
New Global Custom Field: (no value)

**People**
Owner: Philip Willcox  
Requestors: Philip Willcox  
Cc:  
AdminCc:

**Links**
Depends on: (Create)  
Depended on by: (Create)  
Parents: (Create)  
Children: (Create)  
Refers to: (Create)  
Referred to by: (Create)

History
Reverse History — Brief headers — Full headers

# Tue May 12 11:42:00 2009 Ticket created by: pwillcox

8 Reply Comment Forward

Subject: Request for Change: Change Walk Through
RFC Link: http://ipv3.dev.ipsoft.com//IPcm/rfc.htm?rfcID=89
SUBMITTED FOR APPROVAL on Tue May 12 15:41:59 UTC 2009 by pwillcox (Philip Willcox) (IPsoft, Inc.)
Download (untitled) / with headers  
text/plain 205b

## b. IPradar – View the new item

Expand Pause Fix Criteria Open Work Queue												
Client	P	W / L	C	Description	Status	Owner	Created	Modified	ETA	U	A	P R
IPsoft	-	02:52	-	Request for Change: Change Walk Through	Active	pwillcox	05/12 11:41	05/12 11:42	05/12 13:42	U	-	P R
												IPsoft-change 12588

## Email Confirmations

Upon submitting the RFC for approval, you will receive an email similar to the following. Relevant stakeholders in each step of the workflow will receive emails with key links pertaining to the RFC.

**[IPsoft #12588] (IPsoft-change) Request for Change: Change Walk Through**  
Philip Willcox via IPim [IPsoft-change@beaker.ip-soft.net]  
Sent: Tue 5/12/2009 11:42 AM  
To: Philip Willcox

---

RFC Link: <http://ipv3.dev.ipsoft.com//IPcm/rfc.htm?rfcID=89>

SUBMITTED FOR APPROVAL on Tue May 12 15:41:59 UTC 2009 by pwillcox (Philip Willcox) (IPsoft, Inc.)

-----  
Tracking ID:[49788]

-- [Ticket Details] -----  
Tue May 12 11:42:00 2009: Ticket 12588 was acted upon.  
Transaction: Ticket created by pwillcox  
Queue: IPsoft-change  
Subject: Request for Change: Change Walk Through  
Owner: pwillcox  
Requestors: [philip.willcox@ip-soft.com](mailto:philip.willcox@ip-soft.com)  
Status: open  
Ticket URL: <http://ipv3.dev.ipsoft.com://IPim/Ticket/Display.html?id=12588>

Subscribe: <http://ipv3.dev.ipsoft.com://IPim/Ticket/Subscribe.html?id=12588>  
Unsubscribe: <http://ipv3.dev.ipsoft.com://IPim/Ticket/Unsubscribe.html?id=12588>

## Search

You can search for a specific Request for Change in any of these IPcm tabs:

Create

Approve

Implement

Review

- IPcm Search – Searches status “ALL”
- Create – Searches status “DRAFT”
- Approve – Searches status “PENDING”
- Implement – Searches status “APPROVED”
- Review – Searches status “IMPLEMENTED”

1. Search for an RFC by entering some or all of the optional search parameters:
  - a. Name – You can use % as a wildcard
  - b. Status – Here we search “PENDING” since our RFC is awaiting approvers.
  - c. Client
  - d. My Action Items only – Checked by default. Uncheck to see other users’ RFCs.
2. Click **Search**.

Request for Change Search

Applicable Filters

Name (wildcard: %term%):

Status:

Client:

Results per page:

My Action Items only

Practice%

PENDING

IPsoft, Inc.

50

☒

Search

Reset

Requests for Change 1 - 1 of 1

Name	ID	Status	Priority	Category	Workflow	Client	Owner	Updated
<a href="#">View</a> Practice Change	67	PENDING	NORMAL	SUBSTANTIAL	<a href="#">View</a> Basic Approval	IPsoft, Inc.	pwillcox (Philip Willcox)	Fri May 08 10:04:44 EDT 2009

3. In the results row(s) you can click [View](#) to see the RFC or its Workflow.

## Approve

The **View Request for Change** screen shows all the data you have associated with the RFC. So far the RFC has data only in the **Details** and **Assessment** sections.

1. Note a few key fields:
  - a. Status: ("PENDING" at this point the lifecycle)
  - b. Awaiting action by: List of Approvers who must address the RFC
  - c. Edit / Approve / Reject buttons: Available if you have an approver role
  - d. Currently in state(s): Note that the current state is "IPsoft Approval", which means that the RFC has passed unnoticed through the **Client Approval** step. This happened because no users or groups are yet assigned to Client Approval, only a generic change group that currently doesn't have members.

View Request for Change 89 : Change Walk Through

Edit Approve Reject

Name: Change Walk Through

Client: IPsoft, Inc.

View Workflow: Basic Approval

Status: PENDING a

Initiator: pwillcox (Philip Willcox)

Created: Tue May 12 11:35:01 EDT 2009

Updated: Tue May 12 12:33:02 EDT 2009

IPim ticket: 12588

RFC Change Log: View

Currently in state(s): Client Approval d

Awaiting action by: cbaron, mghicas, braiden\_password, bcase, staff1, kmcfadden, root, test, tlossev, staff2 b

Assessment

Priority: NORMAL

Category: SUBSTANTIAL

2. If you want to move the RFC into implementation, click **Approve** and **OK** the prompt.
  - a. Alternately, click **Reject** and the Status becomes **REJECTED**.

- You will receive an email detailing an IPim Request for Change “APPROVED” (or “REJECTED”).

## Implement

In the Implementation phase, Status is **APPROVED**. You can edit Implementation details in the **Edit Request for Change** screen before completing the implementation:

- Click **Edit**

The screenshot shows the 'View Request for Change' screen for a request titled 'Practice Change'. The status is 'APPROVED'. The screen includes fields for Name, Client, Workflow, Status, Initiator, Created, and Updated. There are buttons for 'Edit' and 'Complete Implementation'. A dropdown menu for 'Awaiting action by:' is open, showing a list of users. The bottom section shows 'Priority: NORMAL' and 'Category: SUBSTANTIAL'.

View Request for Change 67 : Practice Change

Edit Complete Implementation

Name: Practice Change  
Client: IPsoft, Inc.  
Workflow: Basic Approval  
Status: **APPROVED**  
Initiator: pwillcox (Philip Willcox)  
Created: Thu May 07 16:34:56 EDT 2009  
Updated: Fri May 08 10:04:44 EDT 2009  
RFC Change Log: View  
Currently in state(s): Implement  
Awaiting action by: cbaron, braiden\_password, mghicas, bcase, kmcfadden, staff1, root, test, staff2, tlossev

Assessment

Priority: NORMAL  
Category: SUBSTANTIAL


- Scroll down to the Implementation section and enter desired details including implementation and testing dates.

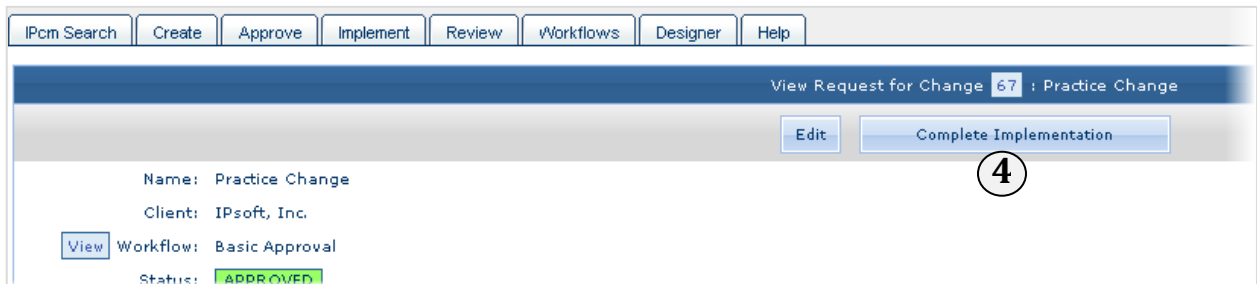
The screenshot shows the 'Implementation' section of the 'Edit Request for Change' screen. It includes fields for Implementation Complete Date, Operational Tests Complete Date, User Tests Complete Date, and Acceptance Tests Complete Date. There are also fields for Implementation Effort and Objectives Achieved.

Implementation

Implementation Complete Date: 05/14/09 15:14  
Operational Tests Complete Date: 05/15/09 15:14  
User Tests Complete Date: 05/16/09 15:14  
Acceptance Tests Complete Date: 05/17/09 15:14

Implementation Effort:  
Objectives Achieved:

3. Click 
4. Once the implementation steps are successfully completed, click **Complete**



IPcm Search Create Approve Implement Review Workflows Designer Help

View Request for Change 67 : Practice Change

Edit Complete Implementation

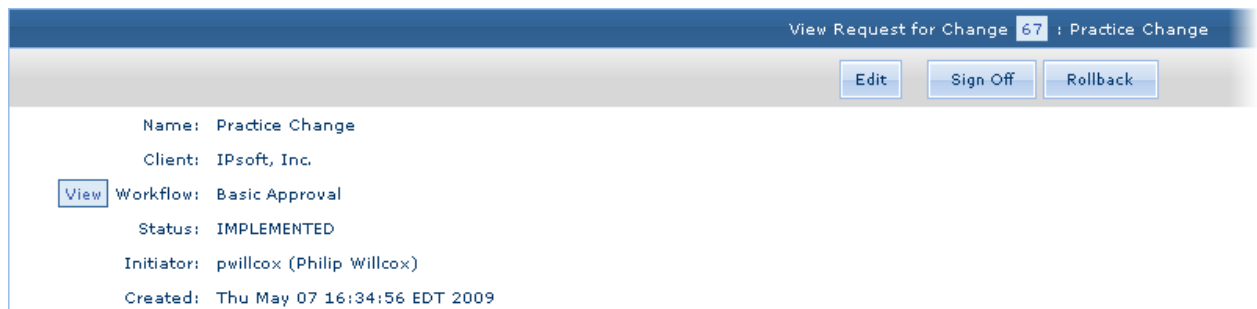
Name: Practice Change  
Client: IPsoft, Inc.  
Workflow: Basic Approval  
Status: APPROVED

**Implementation** to move the RFC to its final stage.

## Review

In the Review phase, Status is **IMPLEMENTED**. Note that, as a reviewer, you see **Edit**, **Sign Off**, and **Rollback** buttons at the top of the View Request for Change screen.

1. Click Edit and scroll down to the bottom of the page.

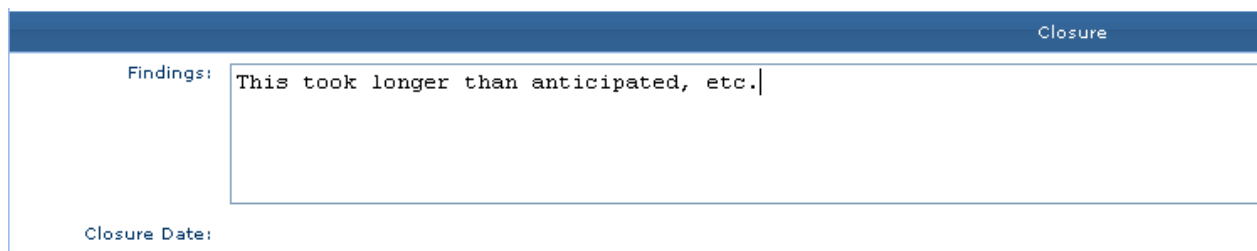


View Request for Change 67 : Practice Change

Edit Sign Off Rollback

Name: Practice Change  
Client: IPsoft, Inc.  
Workflow: Basic Approval  
Status: IMPLEMENTED  
Initiator: pwillcox (Philip Willcox)  
Created: Thu May 07 16:34:56 EDT 2009


2. Add Closure notes.




Closure

Findings: This took longer than anticipated, etc.

Closure Date:

3. Click 

## Rollback or Sign Off

1. If you as Implementer are satisfied with the implementation, click  and then **OK** to close the RFC.

**Note:** Once the RFC is closed, no more edits can be made to it.

2. If you as Implementer are *not* satisfied with the implementation, click **Rollback** to move the RFC back to its initial state. All steps must be completed again.

View Request for Change  : Change Walk Through



Name: Change Walk Through

Client: IPSoft, Inc.

 Workflow: Basic Approval

Status: 

Initiator: pwillcox (Philip Willcox)

Created: Tue May 12 11:35:01 EDT 2009

Updated: Tue May 12 15:52:07 EDT 2009

IPim ticket: 

RFC Change Log: 



# How to Create a Change Workflow

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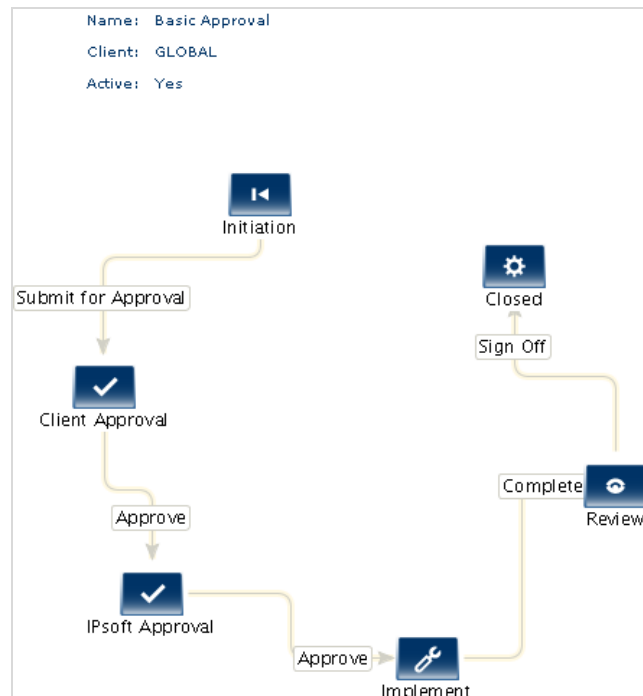
## Overview

Most users will interact with IPcm by simply engaging in one or more steps of the change management workflow—creating a request for change (RFC), for example, or implementing a change. In addition, certain users can create the workflow itself using the IPcm Designer tool (Workflow Client).

In the first half of this Change Management section, you stepped through a workflow called “Basic Approval”, which, as its name implies, is a simple workflow. Workflows must contain the following processes...

- Initiate
- Approve (involves at least one action)
- Implement (involves at least one action)
- Review (involves at least one action)
- Close

...so the “Basic Approval” workflow is the simplest workflow possible with the addition of a second approval.



## User Permissions

**Workflow View** permission allows you only to view existing workflows in the tool.

**Workflow Create** permission gives you full access to create new or modify existing workflows.

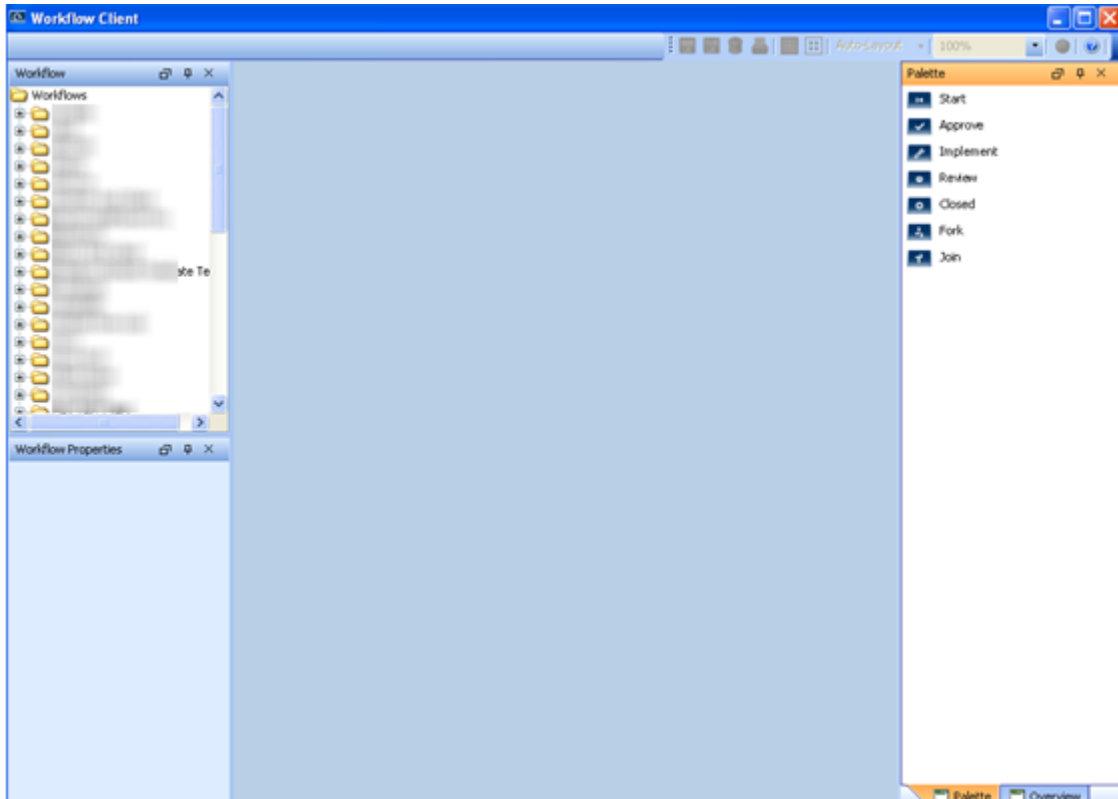
## Open Designer

1. To open the Designer tool, click the **Designer** tab within IPcm (IPcm is in **Service Operation** tab).

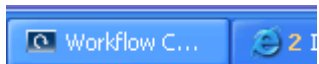
**Note:** Java must be installed on your computer.



2. Login as needed, using the same username and password you use to login to IPcenter.
3. **Workflow Client** will open in a separate window (not within your browser)...

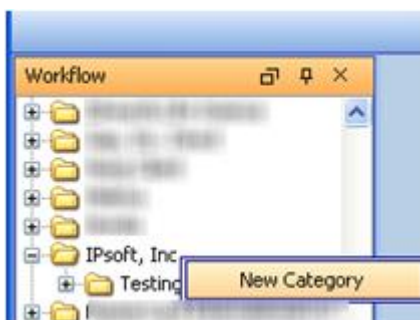


...and in Windows, will be visible on you to your Taskbar.

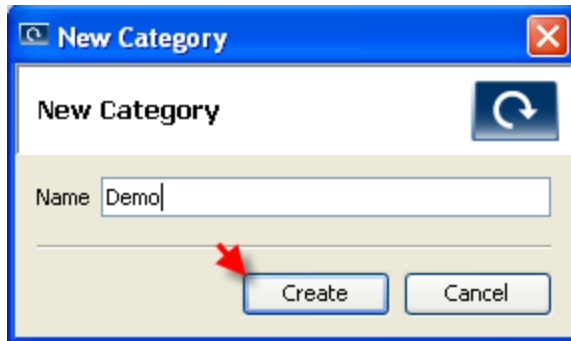


## Create a Workflow

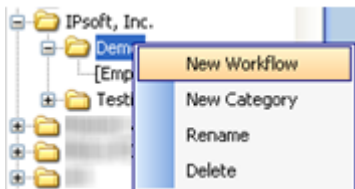
1. In the (upper-left) Workflow section, right click your company and click **New Category**.



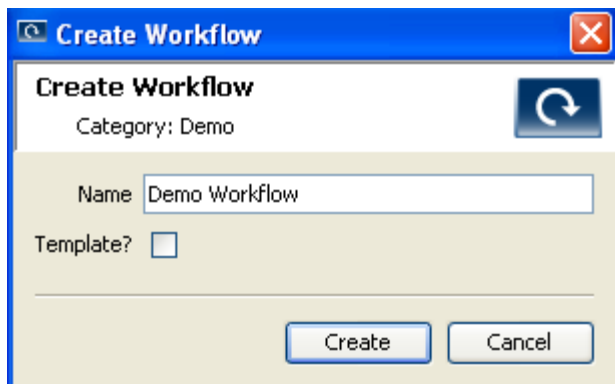
2. Enter the name for your **New Category**, a business group for example, and click Create.



3. Now right-click your new category and click **New Workflow**.



4. Enter the name for your workflow<sup>1</sup>.



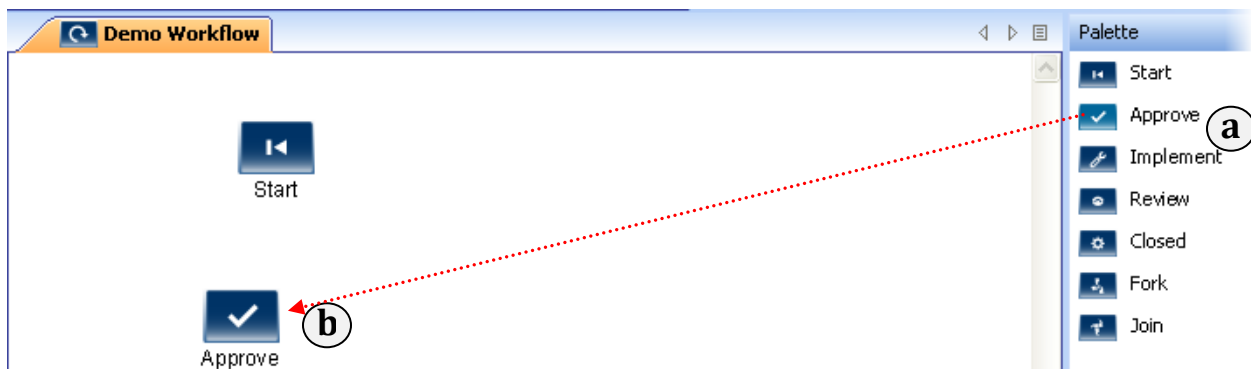
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<sup>1</sup> The **Template?** checkbox relates to upcoming IPcm functionality under development.

## Add Items to Workflow

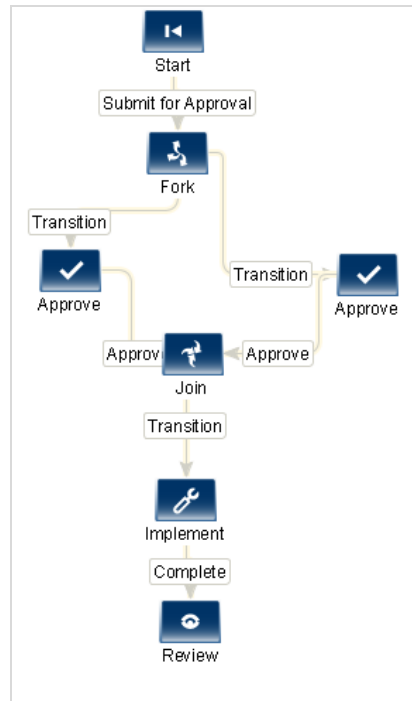
1. Now, simply begin dragging items...
  - a. From the (upper-right) **Palette** section
  - b. ...onto the empty workflow space in the middle of the Designer.

**Note:** Clicking and dragging the icons is intuitive, however if you accidentally create a Transition (which is an attached gray line--more on this following), simply click on the line and hit **Delete** on your keyboard.



2. Once you have added all desired icons for your flow, you can begin connecting them.
  - a. Click-drag on the middle of the origin icon, dragging it (without moving the icon) to the destination icon. A Transition automatically will be created with a default Name.

In our example, adding Transitions by default created the following workflow, which we will now edit (**Fork** and **Join** steps will be explained shortly):

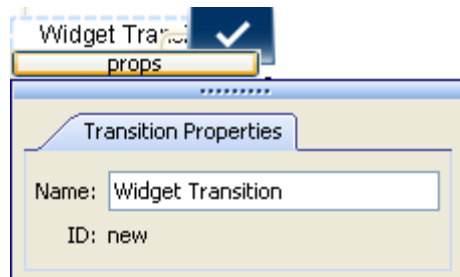


## Edit Workflow States

1. Hover your cursor over one of the icons (for our example, Start) and click on the **props** button to edit the step.



2. Rename a Transition in the same way, clicking **props** under the Transition name.



Now you can edit and customize properties for each state in your flow...

## Edit State Properties

The following sections step you through editing and customizing properties for each specific state in your flow.

### Start

1. Enter another **Name** and **State Notes** if needed in the **State Properties** window.

2. Click outside this small window to return to Designer.

### Approve, Implement, Review

These three states have the same editing window. Edit as follows.

1. Click the **props** button on an Approve, Implement, or Review icon.

#### State Properties

Edit the **State Properties** tab as you require:

2. Enter a **Name**
3. **Include Client group?** – Check if you want to automatically add approval required from everyone in the Client group
4. **Include change** – Check if you want to automatically add approval required from everyone in the Change group

**Note:** **Client group** and **change-group** save time when assigning Actors to a step, since they allow a pre-defined group to be assigned instantly without individually adding in the **Actors** tab.

The screenshot shows the 'Approve' dialog box with the 'State Properties' tab selected. The 'Name' field is set to 'Approve'. The 'State Type' is 'ApprovalState (ID: new)'. There are three checkboxes: 'Include Client group?' (unchecked), 'Include change-group?' (unchecked), and 'Action required by all actors?' (unchecked). The 'State Notes' field is empty.

5. Click **Action required by all actors** if you want all actors to approve before the workflow can leave that step.

### Actors

6. Add **Individual Users** as approvers by clicking a user, then the **Add** button...

The screenshot shows the 'Approve' dialog box with the 'Actors' tab selected. The 'Individual Users' section is active, showing a list of users: 'admin (IPkm Temp Admin)', 'kmcfadden (Kristen McFadden)', 'testnc (Test NC)', 'ergun (Ergun Ekici)', 'staff1 (staff1 staff1)', 'staff2 (staff2 staff2)', 'ipstestnoleak (ipstestnoleak ipstestnoleak)', and 'testnoleak2 (testnoleak2 testnoleak2)'. There are two 'Add' buttons to the right of the list.

7. ...and/or Add **Groups** in the same way.

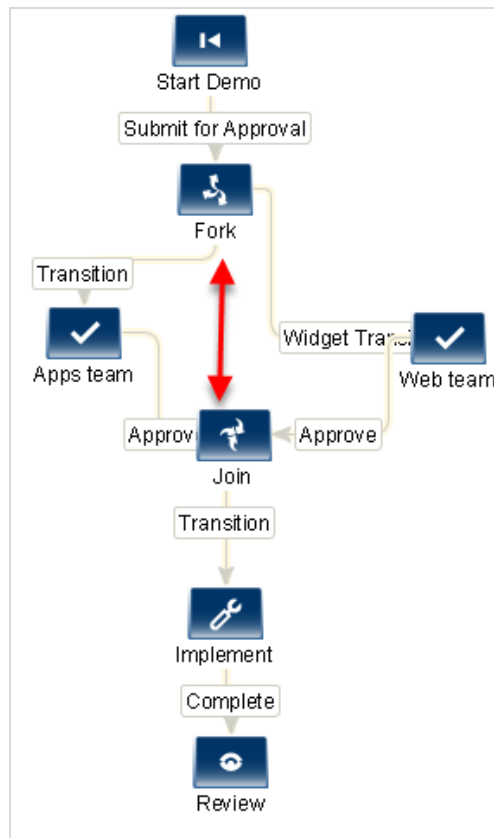
The screenshot shows the 'Approve' dialog box with the 'Actors' tab selected. The 'Groups' section is active, showing a list of groups: 'All IPsoft Users' and 'Braiden Test'. There are two 'Add' buttons to the right of the list.



## Fork and Join

To **Fork** a workflow allows you to assign Approvers in parallel, so that, for example, an Applications team and a Web team could do approvals without waiting on the other team.

Once you create a fork, naturally you must **Join** the fork before you can move onto Implement in order to avoid having multiple parallel flows. Joining will show actors from both sides.

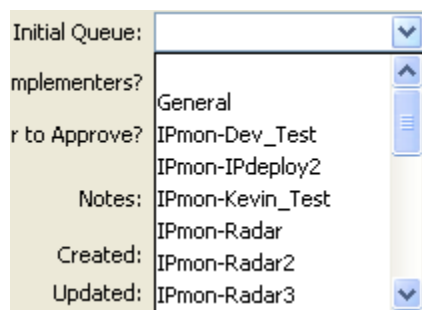


## Edit Workflow Properties

In the (bottom-left) **Workflow Properties** section of the tool, you can update the properties assigned to the workflow.

1. Below **Name**, checking the **Live?** checkbox ensures that the workflow appears among the dropdown options when creating a new RFC.
2. Click the **Initial Queue** dropdown and click a selection. **Initial Queue** selects which IPim queue the workflow will be assigned to.

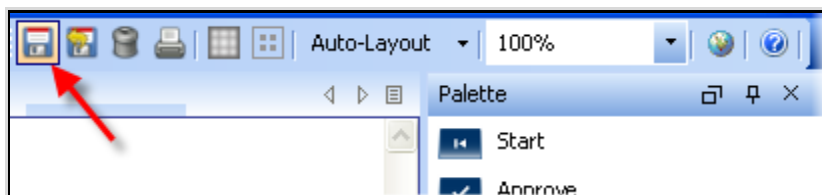
**Note:** The default is the **<Client>-change** queue, for example: IPsoft-change.



3. Click **Allow Overridable Implementers** if you want to allow the option of assigning specific implementers (not limited to the implementers defined in the workflow).

## Save Workflow

1. In the (upper right) toolbar, click the **Save Workflow** icon.



# Configuration Management

## IPcmdb Overview

---

IPcmdb is IPsoft's Configuration Management Database implementation. It gives your organization complete visibility into attributes, relationships, and dependencies of the components across your enterprise computing environment. IPcmdb provides a standard framework for federating and accessing IT information, which integrates communication between the IT management tools.

With IPcmdb, you can add, edit, and search for configuration items via numerous custom criteria. The items, the item types and the custom field types available are all completely configurable. Items can also be associated with other items, so, for example, you can create a "Contact" for a client, link that Contact to Sites or Devices, and link any of them to Sites or Geographical Locations. Associating in this way allows you to identify responsible devices and parties to handle issues as they arise.

IPcmdb—and IPcenter v3 in general—is aligned with ITIL v3 processes.

### Purpose of the Document

This document is divided into two main sections:

- IPcmdb Overview – Step through the IPcmdb tabs: IPcmdb Search, CI Types, Attributes, Select Lists, and Association Types
- Common IPcmdb Tasks – How to add a CI, associate to a CI, disable a CI

## What is a Configuration Item?

The ITIL definition of a configuration item (CI):

*A **configuration item** is an asset, service component or other item that is (or will be) controlled by configuration management.*

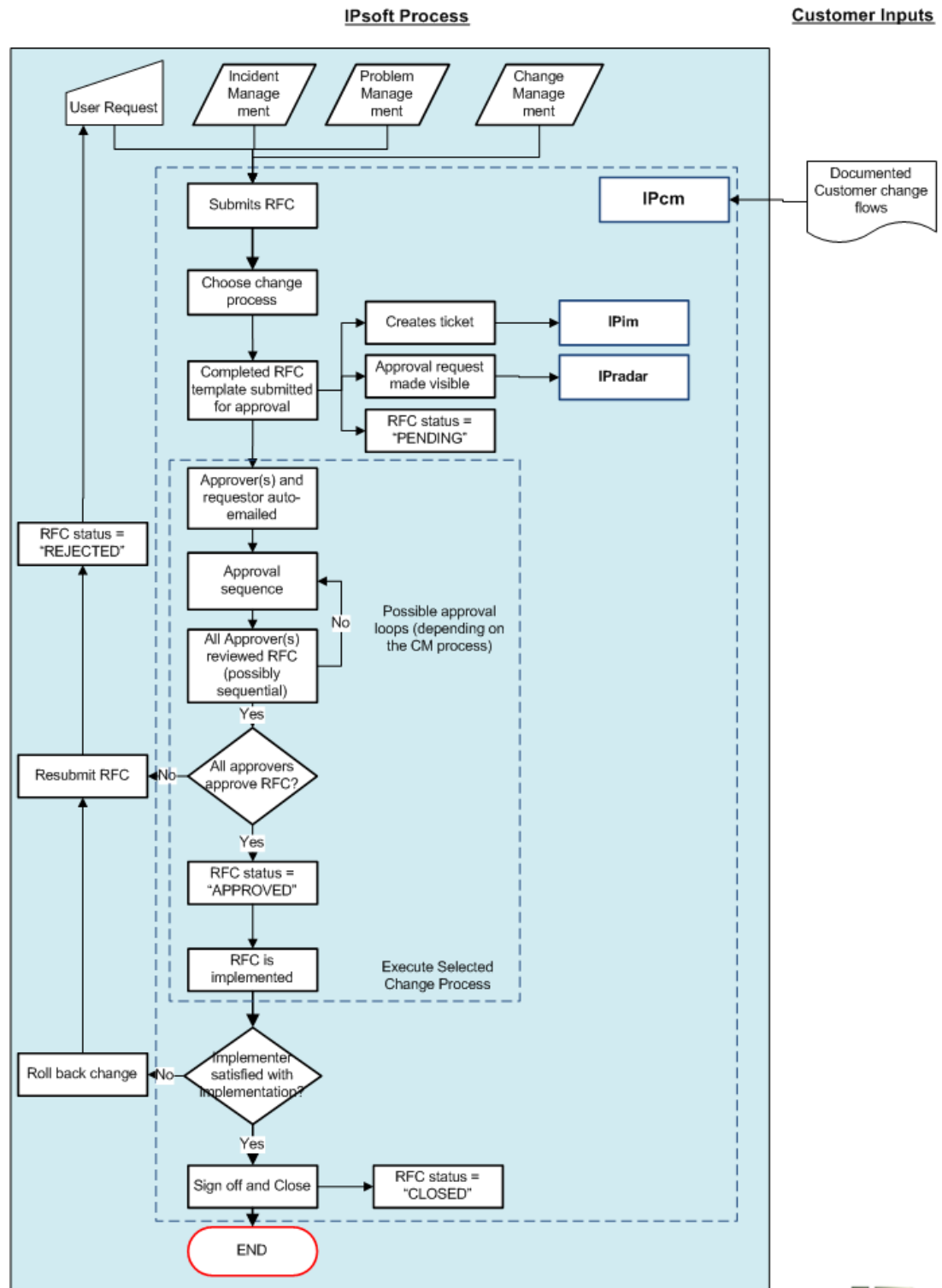
Configuration management ensures that all configuration items that form part of the service or product are identified, provided with a baseline (basic configuration) and maintained<sup>2</sup>.

## Process Model

For the purposes of this section, focus on the right half of the following ITIL flowchart: Configuration Management. As the chart illustrates, Configuration Management interacts closely with Change Management (previous section). Note the IPcenter v3 modules (blue boxes) related to each step.

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<sup>2</sup> Foundations of IT Service Management Based on ITIL v3. Van Haren Publishing. 2007



Workflow 4: Change Management with Configuration Management Workflow

## CI Types in IPcenter

Every CI is placed in a hierarchy of CI Types. Each CI Type has its own custom set of properties that provide relevant information about that class of item, which also determines what properties may be used for custom searches (details follow). Some types are "abstract" and cannot be directly created, but are there to provide custom properties to child category types. All CI Types are themselves fully configurable within IPcmdb; the IPcmdb current hierarchy includes (types in *italics* can directly be created):

- Base CI
  - Base Circuit
    - *Circuit*
  - Base Interface
    - *Interface*
  - *Billing Product*
  - *Communication Endpoint*
  - *Contact*
  - *Device*
    - *Virtual Machine*
  - External Entity
    - *External Network*
  - *Geographical Location*
    - *Site*
  - Protocol Endpoint
    - *IP Endpoint*
  - *Vendor*

### Types, Attributes and Associations

All Configuration Items must have a Name, an Owning Client, and a CI Type. The CI Type will determine what other required or optional attributes the item may have. For example, a Contact needs phone numbers and email, while a Site should contain an address, sometimes a Google maps link, and so on.

The CI Type also determines what types of associations it may have, which allows the engineer to walk through relevant device, contact, and site information when working on an issue. From a CI's perspective, associations may either be "Incoming" or "Outgoing"

depending on that desired flow. Since many "Device" items may be present at a single Client "Site," the Site sees this as an Incoming Association, whereas the Device(s) will see this as an Outgoing Association. When viewing a CI, there will be buttons to add/remove only those associations the current item can handle.

## Navigating IPcmdb

1. To open IPcmdb, hover your mouse over the IPcenter **Service Transition** tab and click **IPcmdb** in the row of tabs that appears below.



2. The IPcmdb page opens by default to **IPcmdb Search**, is detailed in the next section. Note the five tabs below the IPcenter menu (more on each follows):
  - IPcmdb Search
  - CI Types
  - Attributes
  - Select Lists
  - Association Types



## IPcmdb Search



You can search for CI's by client, using a combination of full text search, Item Type, and up to three custom attributes for that item type. Every result is linkable, and the entire table is exportable to Excel.

### Search Page

The **IPcmdb Search** page allows you to:

- a. Create a new Configuration Item (CI)
- b. Search for an existing Configuration Item
- c. View Configuration Items returned in the search

Name	Type	Owning Client	Updated
abc1-ABC-Corporation	Base CI::Geographical Location::Site	IPsoft, Inc.	Mon Jan 12 01:10:41 EST 2009
abc2-DEF-Corporation	Base CI::Device	IPsoft, Inc.	Mon Feb 23 17:25:44 EST 2009

### Permissions

**Note:** You can have either View or Edit rights to the IPcmdb content. Edit rights are required to perform the actions required to add or update CI content.

### Search for a CI

1. In **IPcmdb Search** in the **Configuration Item Search** section, search for an existing CI by entering some or all of the optional search parameters:
  - a. Name – The CI Name. You can use % as a wildcard
  - b. CI Type (more on CI Types following)



- c. Owing Client - The client that the CI belongs to
  - d. Include Subtypes – Checking this will also return CIs (if any) for which this CI is a parent.
2. Optionally add Attribute Name and Value details (more on this following).

Configuration Item Search

Name (wildcard: %term%) ①

Owning Client: IPsoft, Inc.

Results per page: 20

CI Type: Device

Include Subtypes: ☒

Search Reset

Attribute Name

-- Select One -- ②

-- Select One --

-- Select One --

Attribute Value

### Refine Your Search: Add Attribute Values

When you select a CI Type, three dropdowns (customized to the CI Type you selected) will appear under **Attribute Name**.

The **Attribute Name** dropdowns allow you to further refine your search. If you select CI type **Device**, for example, you will see device-specific Attribute search options like Model Number, SNMP System Object ID, etc. (whereas a CI Type **Geographic Location**, for example, will have Attribute search options like Street, Region, etc.)

Selecting an **Attribute Name** item will either open a text box (enter a value, as for **Model Number**) or another dropdown (select an item, as for **OS Type**):

Attribute Name

Model Number

OS Type

-- Select One --

Attribute Value

12121212

CatOS

IOS

Linux

Other

Solaris

Windows

3. Click **Search**.
4. In the results row(s) you can click on one of the results to view its details.

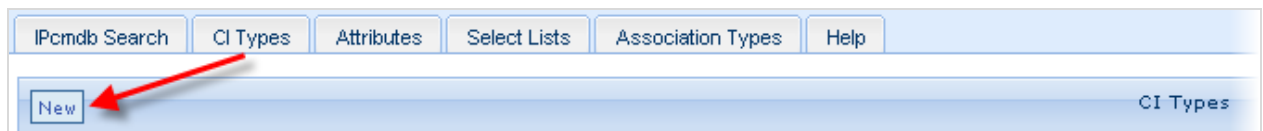
## Create a CI Type

This section steps you through creating a new CI Type. Think of a CI Type as a class of configuration item with shared, definable characteristics.

**NOTE:** You will rarely, if ever, create a CI Type. More commonly, you will add specific items--a router, a client address, a site—of an *existing* CI Type. For examples of adding a CI of an existing CI Type, See [Add a CI](#) in the second half of this guide.

To create a new CI Type, follow these steps.

1. Click the **CI Types** tab, then click **New**.



2. Enter CI Type details:
  - a. Name
  - b. Abstract?
  - c. Parent CI Type – Associates your new CI Type with an existing type. For our example, we created a “Test CI” CI Type and associated it with **Device** Parent Type
  - d. Global? – Check this to make the CI Type available to all clients
  - e. Clients – Click the client(s) you want the CI Type available to. (Alt-Click or Shift-Click to select multiple clients)

A screenshot of the 'Edit CI Type' form in the IPcenter application. The form is divided into two main sections. The top section contains the following fields: 'Name' (a text input field), 'Abstract?' (a checkbox), and 'Parent CI Type' (a dropdown menu currently showing 'None'). The bottom section is titled 'Availability' and contains 'Global?' (a checkbox) and 'Clients' (a list box with a scrollbar). At the bottom right of the form are three buttons: 'Save Changes', 'Reset', and 'Delete'.

- f. Click **Save Changes**

## Edit CI Type

3. Notice your newly created CI Type in the list (For this example, we created “Test CI”.) Click **Edit** to change your item (or any other that you have permissions to edit).

Edit	25	Test CI	Base CI::Device::Test CI
------	----	---------	--------------------------

4. Notice in the **Edit CI Type** page under the **Inherited Attributes** section that—if you associated your device with a Parent CI Type--you can see the Attributes inherited from the parent type. To add additional attributes, select an item in the **Select Attribute** dropdown and click **Add**. More on Attributes following.

Edit CI Type

Name:

Abstract? ☐

Parent CI Type:

Availability

Global? ☐

Clients: 

abcd  
AECOM  
Airgas  
AlvLove

Save Changes

Reset

Delete

Attributes

5

Inherited Attributes

Attribute	Default	Enabled?	From
Description		true	<input type="button" value="Base CI"/>
Notes		true	<input type="button" value="Base CI"/>
Legacy ID		true	<input type="button" value="Base CI"/>
Type		true	<input type="button" value="Device"/>
Monitored	false	true	<input type="button" value="Device"/>
Install Date		true	<input type="button" value="Device"/>

## Create an Attribute

You can assign attributes to a CI type, including attributes you create from scratch.

Attributes—examples include Address, Bill Stop, OOB Phone Numbers—can be attached to CI Types to provide more thorough CI information.

1. Click the **Attributes** tab, then click **New**.

The screenshot shows the IP Center interface with the 'Attributes' tab selected. A red arrow points to the 'New' button in the top left corner of the 'Attribute Definitions' section. Below the button is a table with columns 'ID', 'Name', and 'Description'. The table contains one row with ID '2', Name 'Description', and Description 'Description of CI'.

ID	Name	Description
2	Description	Description of CI

2. In the **Edit Attribute Definition** page, enter Attribute details:
  - a. Name
  - b. Description - General description of CI. May be overwritten by automated processes; e.g., Interfaces will have the Description that is updated into the Description field of the Interface CI.
  - c. Data Type

The screenshot shows the 'Edit Attribute Definition' page. It has three input fields: 'Name' with the value 'Test Attribute', 'Description' with the value 'Demo', and 'Data Type' with a dropdown menu showing 'Text' selected. Below the dropdown is a list of data types: Boolean, Date, DateTime, Double, Long, String, Text, and Url. To the right of the fields are three buttons: 'Save Changes', 'Reset', and 'Delete'.

Name:

Description:

Data Type:

Boolean  
Date  
DateTime  
Double  
Long  
String  
Text  
Url

3. Click **Save Changes**.

## Edit Attribute

Notice your newly created Attribute in the list. You can Edit your attribute (or any other that you have permissions to edit):

- Click **Edit**:

<a href="#">Edit</a>	87	Test Attribute	Demo
----------------------	----	----------------	------

- Edit one or more of the fields and click **Save Changes**.

Edit Attribute Definition	
Name:	<input type="text" value="Street"/>
Description:	<input type="text"/>
Data Type:	<input type="text" value="String"/> ▼
<a href="#">Save Changes</a> <a href="#">Reset</a> <a href="#">Delete</a>	

## Create Select Lists

The **Select Lists** tab contains item lists with associated values, for example, Regions (AMER, APAC, CALA, EMEA) or Device Types (Appliance, Application Switch, etc.).

- To add an item, click the **Select Lists** tab, then click **New**.

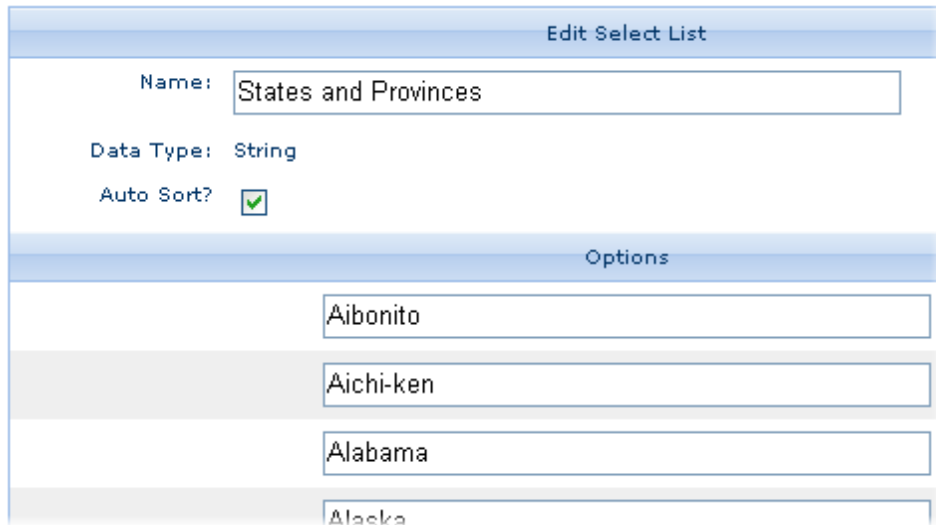
<a href="#">IPcndb Search</a>	<a href="#">CI Types</a>	<a href="#">Attributes</a>	<a href="#">Select Lists</a>	<a href="#">Association Types</a>	<a href="#">Help</a>
<a href="#">New</a> <span style="float: right;">Select Lists</span>					
		ID	Name		
<a href="#">Edit</a>	1	States and Provinces			

- Enter the following and click **Save Changes**.
  - Name
  - Data Type
  - Auto Sort?

Edit Select List	
Name:	<input type="text"/>
Data Type:	<input type="text" value="String"/> ▼
Auto Sort?	<input checked="" type="checkbox"/>
<a href="#">Save Changes</a> <a href="#">Reset</a> <a href="#">Delete</a>	

## Edit Select List

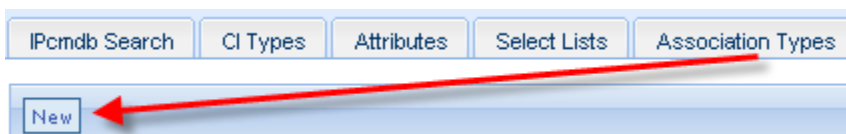
3. To Edit your Select List (or any other that you have permissions to edit), click **Edit** next to the items.
4. Enter your change and click **Save Changes**.



## Create Association Types

CI associations are used to link different CIs that impact each other. The **Association Types** tab contains detail options regarding how CIs can relate to one another.

1. To add an Association Type, click the **Association Types** tab, then click **New**.



2. Enter some or all of the related fields:
  - a. Name
  - b. Abstract?
  - c. Parent Association Type - Associates your new Association Type with an existing type.  
**NOTE:** Source CI Type must be equal to or descended from the parent's type.
  - d. Source CI Type
  - e. Source Description

- f. Target CI Type
- g. Target Description
- h. Multiplicity – One to One, One to Many, Many to One, Many to Many

## CI Associations

### Site to Device (One to Many)

A Site may contain many Devices. A Device can belong to one and only one site.

### Contact to Anything (One to Many)

Every CI type can have many contacts associated with it.

### Device to Interface (One to Many)

A Device and can have many interfaces associated with it.


### Interface to Circuit (One to One)

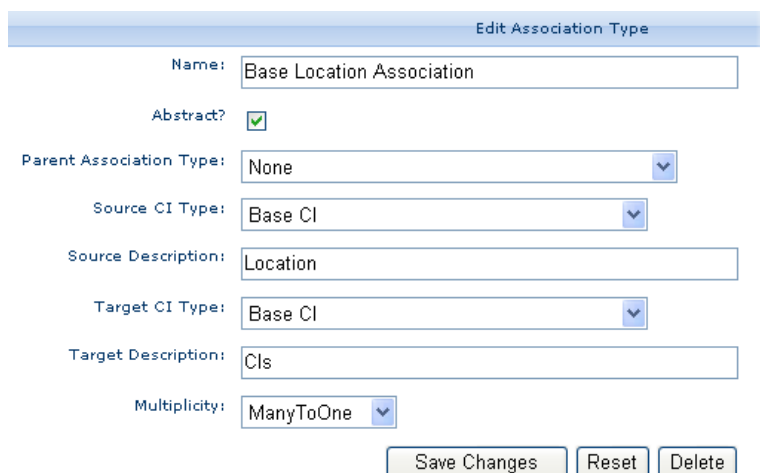
An Interface can be associated to exactly one circuit and vice versa.

### OOB Access to Device (One to Many)

An OOB CI and can have many Devices associated with it.

## Edit Association Type

1. To Edit your Association Type (or any other that you have permissions to edit), click  next to the item.
2. Enter your change and click **Save Changes**.



**Edit Association Type**

Name:

Abstract? ☒

Parent Association Type:

Source CI Type:

Source Description:

Target CI Type:

Target Description:

Multiplicity:

# Common IPcmdb Tasks

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This section steps you through performing common IPcmdb tasks:

- Add a CI
- Disable a Device

## Adding CI Types – Specific Differences

Following, you will step through how to add a **Site**. Before you similarly consider creating a device, interface, circuit, or OOB Access, however, be aware:

### Create Device

You should not have to create a device in IPcmdb. Devices are automatically synced from the monitoring server.

### Create Interface

You should not have to create an interface in IPcmdb. Interfaces are synced every hour from the monitoring server and automatically associated to the device.

### Create Circuit

Create a new circuit and enter the requisite information. Associate the circuit to the interface on the router or switch that it is connected to.

### Create OOB Access

Create the Out of Band Access CI. The name should be in format: OOB-<PHONE NUMBER>. Associate the OOB CI with the device it is connected to.



## Add a CI: Site

Earlier you stepped through how to [Create a CI Type](#). This section shows you a more common task: how to add a specific CI—in this example, a site.

### View Change Ticket

1. To begin the process of adding a CI, view the change ticket (see **Change Management** section for details) and gather relevant info, i.e., Contact, Device, Circuit Data information.

# 12545: Request for Change: Basic Approval													
<a href="#">Display</a> <a href="#">History</a> <a href="#">Basics</a> <a href="#">Dates</a> <a href="#">People</a> <a href="#">Jumbo</a> <a href="#">Comment</a> <a href="#">Reply</a> <a href="#">Resolve</a> <a href="#">Subscribe</a> <a href="#">Unsubscribe</a> ☆													
<b>Ticket metadata</b>													
<b>The Basics</b> Id: 12545 Status: open Priority: 0/0 Queue: IPsoft-change	<b>Dates</b> Created: Mon May 11 16:42:50 2009 Starts: Not set Started: Mon May 11 16:42:50 2009 Last Contact: Not set Due: Not set Closed: Not set Updated: Mon May 11 16:50:37 2009 by pwillcox (philip.willcox@ip-soft.com) - Philip Willcox (IPsoft)												
<b>Custom Fields</b> Globally Available Ticket Custom Field: <i>(no value)</i> New Global Custom Field: <i>(no value)</i>													
<b>People</b> Owner: Philip Willcox Requestors: Philip Willcox Cc: AdminCc:	<b>Links</b> Depends on: (Create) Depended on by: (Create) Parents: (Create) Children: (Create) Refers to: (Create) Referred to by: (Create)												
<b>History</b>													
Reverse History — Brief headers — Full headers <table border="1"> <thead> <tr> <th>#</th> <th>Mon May 11 16:42:50 2009</th> <th>Ticket created by: pwillcox</th> <th>Reply</th> <th>Comment</th> <th>F</th> </tr> </thead> <tbody> <tr> <td colspan="6">Subject: Request for Change: Basic Approval</td> </tr> </tbody> </table>		#	Mon May 11 16:42:50 2009	Ticket created by: pwillcox	Reply	Comment	F	Subject: Request for Change: Basic Approval					
#	Mon May 11 16:42:50 2009	Ticket created by: pwillcox	Reply	Comment	F								
Subject: Request for Change: Basic Approval													

### Search IPcmdb

2. Search IPcmdb for Site. Site exists?
  - a. Yes – Skip ahead to [Add Associations to a CI](#).
  - b. No – Add site information (See [Add Site](#), next; note CI Naming Conventions).
3. Validate Site, Contact info

### Add Site

To add a site, start in the **IPcmdb Search** tab and follow these steps:

4. In the **CI Type** dropdown, select **Site** and click **Create**.



## CI Naming Conventions

Configuration Items (CI) names must be unique on a per client basis. When naming a CI in the IPcddb, use the following conventions:

- Sites: Use the client provided Site Name or the IPsoft Site ID
- Contacts: <FIRST NAME> <LAST NAME>
- Circuit ID: Vendor Provided Identifier
- Devices: <IPmon Hostname>
  - **Note:** Devices are *automatically* synched, so you should not have to create one.
- Interfaces: <Device CI Name>--<Interface Name>
  - **Note:** Interfaces are *automatically* synched, so you should not have to create one.

## Add Associations to CI

Depending on the type of CI, you can add various associations to it. To a Site, for example, you can associate Contacts, Devices (both shown following), and Site Charges:

Contacts:

Devices at Site:

Site Charges:

## Associate a Contact

6. To add a Contact to the site, you first must have created the Contact. If you need to create one to add to the site and don't want to lose the new Site info you have added:
  - a. **Save Changes** to the new site
  - b. Create your contact (follow the steps in [Add Site](#), but create a **Contact**)
  - c. Search for the site you created (see [IPcddb Search](#)) and add the contact to your Site as follows:

7. At the bottom of the **Edit Configuration Item** page under **Incoming Associations**, click **Add** next to **Contacts**.

Outgoing Associations

Incoming Associations

Contacts: **Add**

Devices at Site: **Add**

Site Charges: **Add**

**Save Changes** **Delete**

8. Enter search criteria for the contact, for example, the name of the Site the person is the contact for and click **Search**.
9. Click **Select** next to result row contact you want to add.

Configuration Item Search

Name (wildcard: %term%)

Owning Client: IPsoft, Inc.

Results per page: 20

CI Type: Contact

Include Subtypes: ☒

**Search** **Reset**

Attribute Name	Attribute Value
-- Select One --	
-- Select One --	
-- Select One --	

Configuration Items 1 - 9 of 9 **Export to Excel**

	Name	Type	Owning Client	Updated
<b>Select</b>	JUNIT TEST CONTACT	Base CI::Contact	IPsoft, Inc.	Tue May 12 00:48:25 EDT 2009
<b>Select</b>	JUNIT TEST CONTACT	Base CI::Contact	IPsoft, Inc.	Tue May 12 00:50:21 EDT 2009

10. Close the Search screen and you will see under **Incoming Associations** that the contact is now associated with the Site.

### Associate a Device to the Site

1. Associate Devices to Site
  - a. Find the Site in **IPcldb Search** and click **Edit** at the bottom of the Edit screen.

- b. In the **Incoming Associations** section, next to **Devices at Site**, click



Incoming Associations

Contacts:

Devices at Site:

Site Charges:

- c. Find the device you want to associate in the search window and click **Select**.
2. Validate device info and interface associations
  3. Was OOB info provided by the customer?
    - a. Yes – Add OOB Entry to IPcmdb and associate to Device
    - b. No – Go to next step
  4. Was circuit info provided by customer?
    - a. Yes – Go to next step
    - b. No – If it's a WAN device, request Circuit info from the customer
  5. Does circuit exist in IPcmdb?
    - a. Yes – Go to next step
    - b. No – Add new circuit entry to IPcmdb
  6. Associate Circuit to Interface and Vendor.

## Edit a CI

1. To update an existing CI, [Search IPcmdb](#) and click on the CI you want to Edit in the search results:

Configuration Items 1 - 3 of 3				Export to Excel
Name	Type	Owning Client	Updated	
abc1-ABC-Corporation	Base CI::Geographical Location::Site	IPsoft, Inc.	Mon Jan 12 01:10:41 EST 2009	
Site Demo	Base CI::Geographical Location::Site	IPsoft, Inc.	Fri May 22 16:16:34 EDT 2009	

2. Click **Edit** in the detail screen for the CI.

Site Demo (Base CI::Geographical Location::Site)

Name: Site Demo  
Owning Client: IPsoft, Inc.  
CI Type: Base CI::Geographical Location::Site  
Created: Fri May 22 16:16:34 EDT 2009  
Updated: Fri May 22 16:16:34 EDT 2009

Edit

Attributes

Base CI

Description: Creating Site for user guide

3. Update CI data directly on the **Edit Configuration Item** page and click **Save Changes** at the bottom of the screen:

Edit Configuration Item - Site Demo (Base CI::Geographical Location::Site)

Name: Site Demo  
Owning Client: IPsoft, Inc.  
CI Type: Base CI::Geographical Location::Site  
Created: Fri May 22 16:16:34 EDT 2009  
Updated: Fri May 22 16:16:34 EDT 2009

Attributes

Base CI

Description: Creating Site for user guide  
Notes: Hours 0900 to 1700 EST

## Edits Populate Across IPcenter

Changes you make to a CI in IPcmdb update elsewhere in IPcenter:

### Monitoring Data - Edits Updated Daily

If you edit a monitored item—site, contact, circuit, OOB billing—the items are re-synched on a daily basis, so you will see the updates on monitored items within a day.

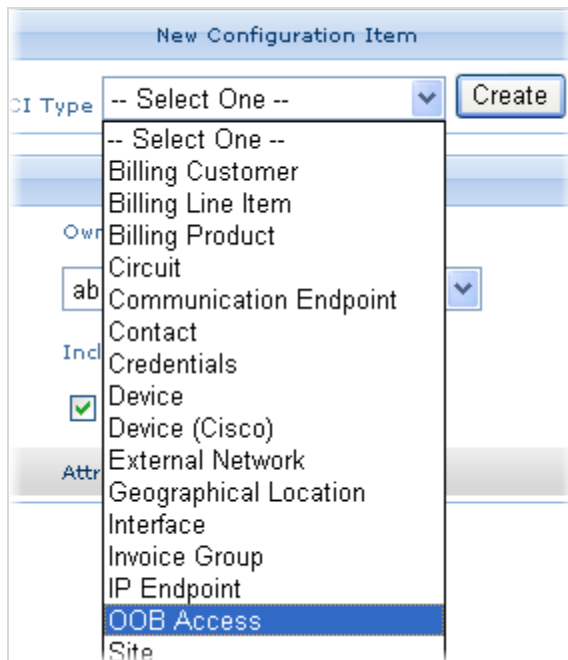
### Contact Edits

If you edit a contact, your changes will be updated to all sites.

### Add OOB Access Association

Add needed Outgoing and Ingoing Associations, including OOB Access information (OOB: Out-of-Bound) as follows:

1. For new, customer-provided OOB info, first create an OOB Access item and add customer information to it.



### Disable a Device or Site

To disable a CI (in this example, a device), first you must perform a few steps in IPmon to prepare for the disable.

### Disable Notifications in IPmon

1. Disable notifications for the device via the IPmon GUI

2. Execute multitool on the device that you would like to disable<sup>3</sup>.

### Edit the Device in IPcldb

3. Find the device in the CMDB ([Search IPcldb](#))
4. Edit the device and set the following in the **Attributes** section of the **Edit Configuration Item** screen:

- Monitored: False

Monitored \* ☐ True ☒ False ☐ Clear

- IPsoft Managed: False

IPsoft Managed ☐ True ☒ False ☐ Clear

5. Click **Save Changes**.

### Update IPim / IPcm

6. Update IPim / IPcm, noting that the device has been removed from monitoring and billing.

Resolve ticket #12585 (Request for Change: Practice Change)

Display History Basics Dates People Jumbo Comment Reply Resolve Subscribe Unsubscribe ☆

Status: resolved Owner: pwillcox (Unchanged) Worked: Minutes

Update Type: Comments (Not sent to requestors)

Subject: Request for Change: Practice Change

One-time Cc:

One-time Bcc:

Attach: Browse... Add More Files

Message: Device removed from monitoring and billing.

7. Set the closing codes to: Customer / Disconnect / Disconnect:

IPcm Closure section update:

Closure

Findings: Closing Codes: Customer / Disconnect / Disconnect

<sup>3</sup> /apps/IPsoft/utlils/multitool.pl -c <CLIENT CODE> --hostname <HOSTNAME> --monitor 0