

TECHNICAL BRIEF

UtiliSphere™ Intelligence Center

*Transform Data into Intelligence and Action
for the Energy and Utilities Industries*



July 2012

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Introduction

Data is everywhere; and the volume of data is exploding, growing at rates previously thought unimaginable in all industries, including energy and utilities. Unfortunately, leveraging that data – such as of emails, photos, documents, and more stored in both a structured and unstructured format – into information required for effective decision making is often difficult, complex and time consuming. Real “intelligence” is achieved by correlating information from various sources and aligning it to business objectives.

irth Solutions has been serving the energy and utility industries for years, and because we know this space, we know many of the frequently-asked questions that must be answered. We understand the risk you face when you lack visibility into your data, thus lack ability to communicate it to the people who need it most. We also understand that while more data can lead to better information, information overload can be just as bad as too little information.

Our approach is to focus on the business question that needs to be answered, and leverage the necessary data to answer the question and enable action. By leveraging a Business Intelligence solution like UtiliSphere™ Intelligence Center, energy and utility companies can recognize value from data sources that were once impossible to access.

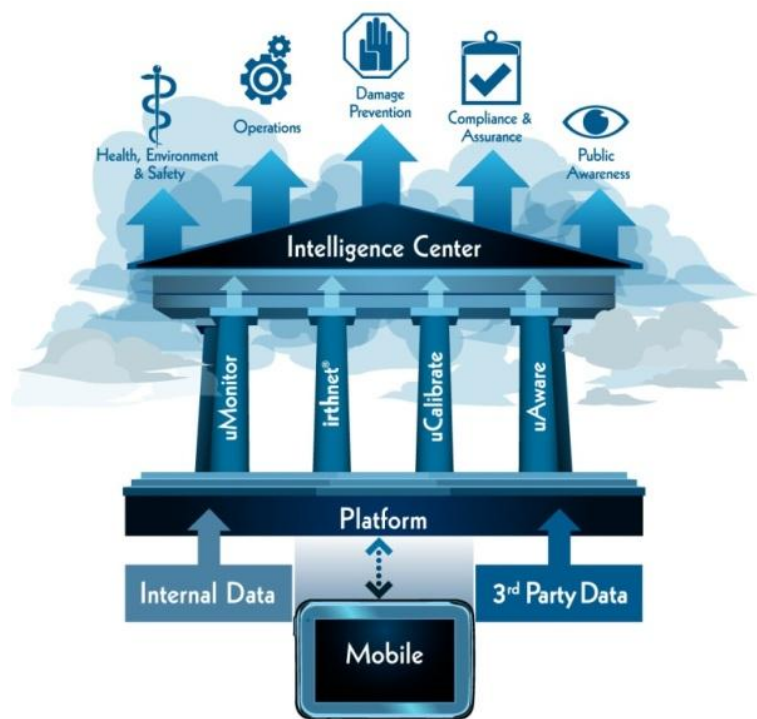
We’re excited to introduce you to UtiliSphere Intelligence Center in this technology brief. As leaders in the industry, we at **irth** Solutions constantly look at new ways to deliver the most accurate, insightful and actionable information to the energy and utility industries.

UtiliSphere Intelligence Center

As the Business Intelligence center for UtiliSphere, Intelligence Center allows energy and utility companies to recognize value from operational data sources related to distributed assets. Intelligence Center correlates and visualizes data to provide out-of-the-box answers to the most important business questions around system protection, safety and compliance, enabling more-informed business decisions to be made. From instant dashboard feedback to self-service analytics encompassing key performance metrics, Intelligence Center provides a workspace that is customizable for the individual user and can directly impact operations.

To realize revenue protection, efficiency improvements, lower operational costs, the **irth** Solutions UtiliSphere Intelligence Center integrates data from a variety of external operational technology sources. Examples of these sources include damages databases, GIS systems, Enterprise Asset Management systems, and public domain information. By leveraging that data, coupled with the critical data that UtiliSphere already manages related to excavation requests, Maintenance & Operations divisions of large energy and utility companies can find the best possible answers to important business questions. In addition to helping to protect revenue, business intelligence solutions also have the capability to improve operational efficiency and reduce costs for energy and utility companies.

In the remainder of this document, you will see that we have subscribed to the best-practice approach of focusing on the business question first. At **irth** Solutions, we believe the information to answer the business question is always available and UtiliSphere Intelligence Center provides the technology to import, analyze and deliver that answer to everyone who needs it. UtiliSphere not only leverages the historical data sets to understand trends, but also can leverage the power of business intelligence to be more predictive. Gaining insight into what may happen in the future, based on what happened in the past, can better assist customers to plan resources and budgets.



Administrative Dashboards

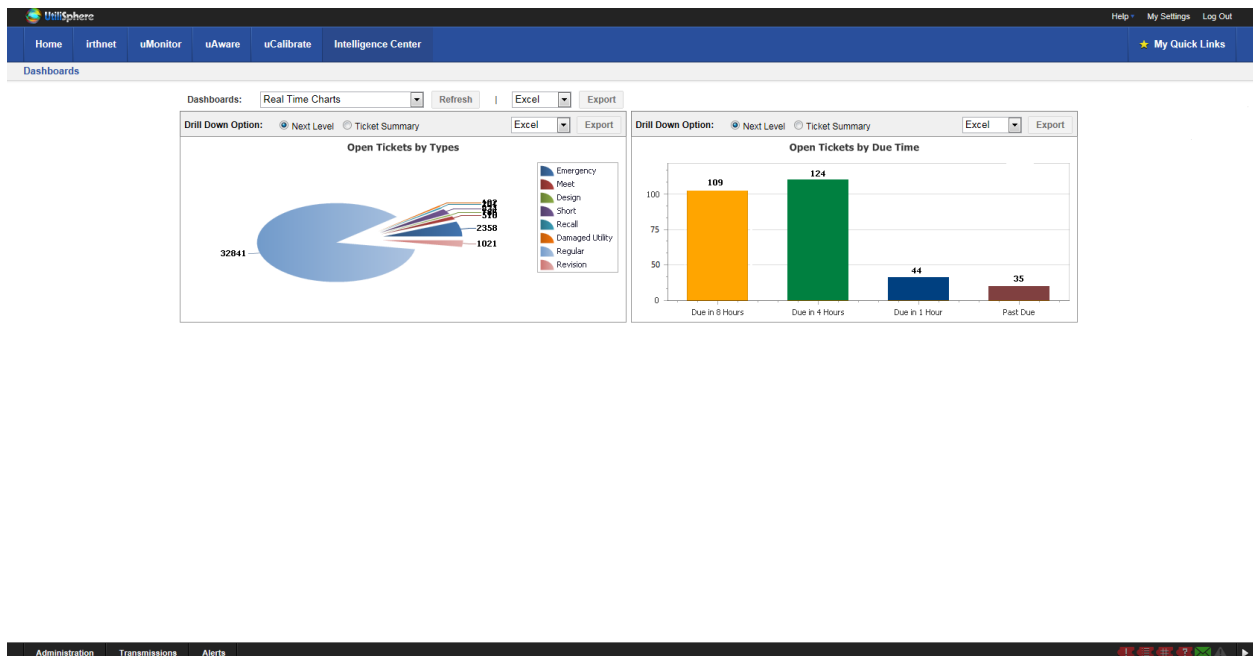
Out-of-the-box dashboards feature drill-down capability to enhance visualizations of critical system data for Administrators. These dashboards enable further exploration of system activity data, from charts and graph summaries to detailed tables of activity information.

Real-Time Charts

Gain insight into both the productivity of Operator teams to help them become more efficient and into the current state of your Locator teams (either internal or sub-contracted locators) to ensure you are being charged appropriately for tickets, that work is being performed according to expectations and it's done in accordance with regulations.

EXAMPLE QUESTIONS

1. **How many tickets are open by type?** View current state of all ticket types, especially emergency, for insight into current state-of-play
2. **How many tickets are coming due?** View past-due tickets that are critical and high risk, so understanding how many are coming due at any given point can give unique insight into actionable result
3. **How many monitoring activities are open?** View monitoring and observation activities around high risk digs to help ensure safety and compliance



This dashboard view enables you to see how many tickets are open by type and how many tickets are coming due.

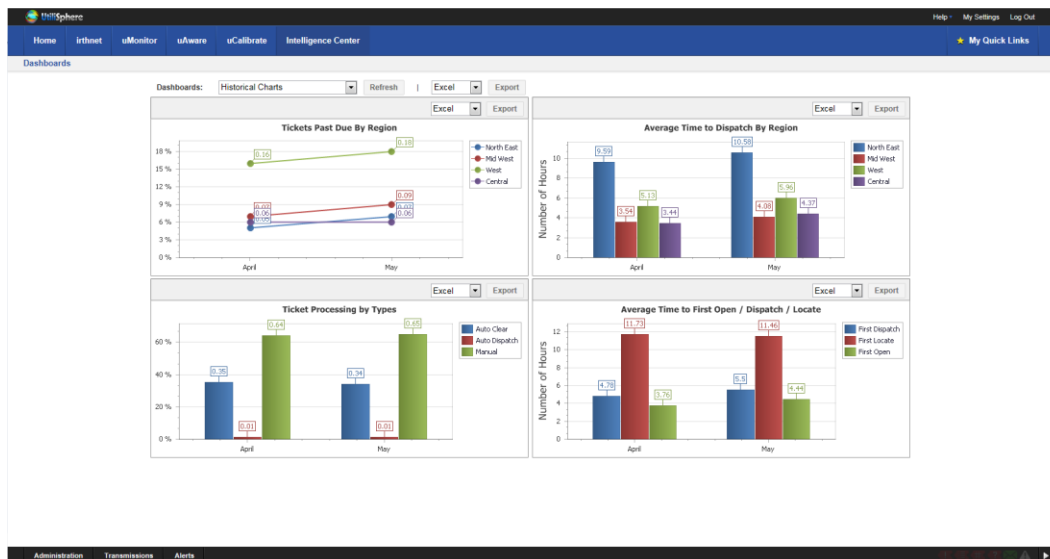
Historical Charts

Gain insight into the historical trending to manage standbys/observations that could become compliance issues, evaluate the impact and prioritization of public awareness activities in a specific region to help ensure public safety, and identify highest-risk regions with the most dig activity to prioritize maintenance work and deploy experienced resources to ensure system protection and safety.

Every organization wants to view its data in the way that best enables the business to ensure system protection, safety and compliance. UtiliSphere Intelligence Center supports User-defined hierarchies to organize data for charts, enabling users to make better decisions and take action on a per-region to minimize risk and maximize productivity.

EXAMPLE QUESTIONS

1. **What percent of tickets are past due by region?** Past due tickets are a serious compliance issue so better insight into trending over time could indicate compliance breach risk.
2. **What percentage of tickets require action in the field?** Understand which tickets are handled by screeners, increasing productivity and allowing the field to focus on what's most critical
3. **What is the average time to dispatch, locate or open a ticket?** Ensure that tickets are screened and/or located promptly. Tracking this information ensures that tickets are being addressed on time, thus helping to avoid fines or penalties due to past-due locates.
4. **What is the average time to dispatch per region?** Dispatch time could vary by region, which provides insight into compliance and system risk geographically.
5. **How many tickets were received by region?** Understanding the ticket volume per region provides insight that activity is happening in the region and additional focus may be needed
6. **How many tickets are auto-processed?** Understand trends in auto-clear and/or auto-dispatched that enable more-informed decisions on resource utilization, improving productivity.



Historical charts provide insight into ticket management to help organizations pinpoint areas for improvement for productivity, safety and compliance purposes.

Operator Dashboard

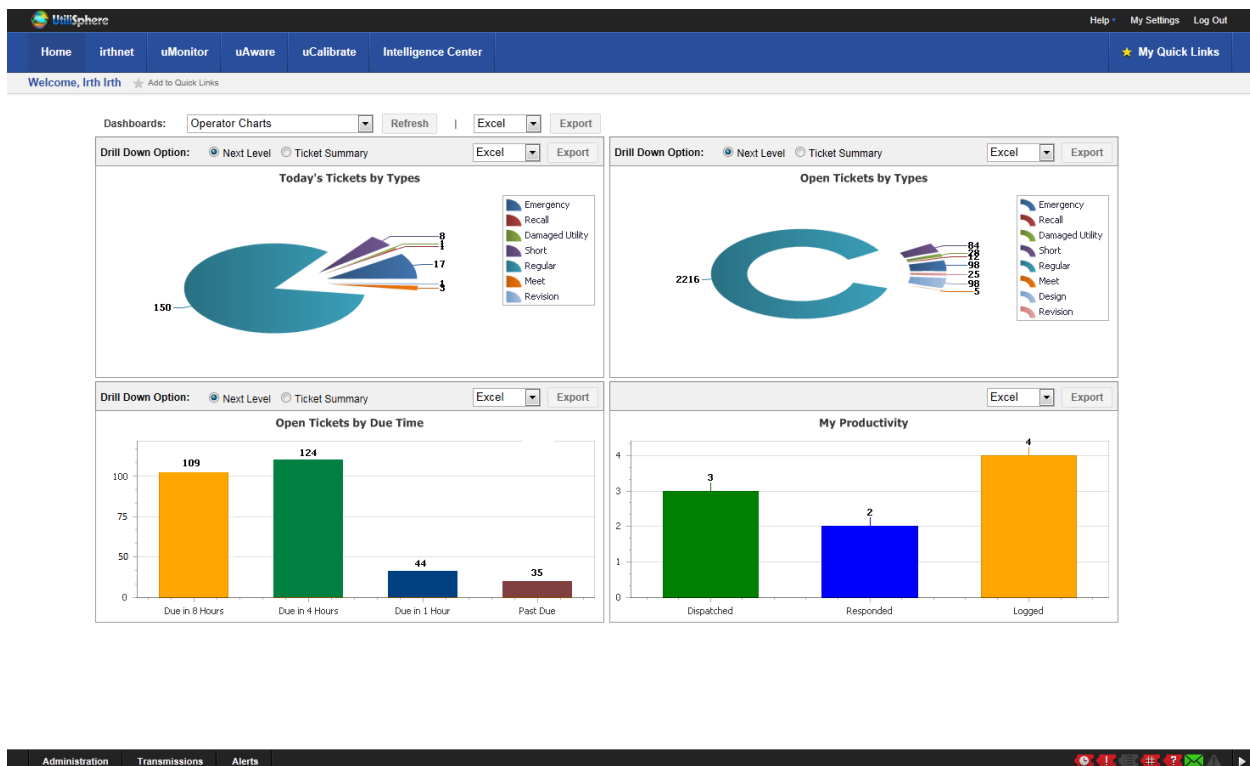
The out-of-the-box Operator Dashboard features drill-down capability to enhance visualizations of critical system data. These dashboards enable further exploration of system activity data, from charts and graph summaries to detailed tables of activity information.

Real-Time Charts

Operators gain critical insight into the current state of the tickets they manage to help them meet productivity/efficiency goals while ensuring safety and compliance.

EXAMPLE QUESTIONS

1. **How many tickets received today by type?** View my current state of all ticket types for insight into current state-of-play
2. **How many tickets are open by type?** View my current state of open ticket types, especially emergency, for insight into current state-of-play
3. **How many tickets are coming due or past due?** View my past-due tickets that are critical and high risk, so understanding how many are coming due at any given point can give unique insight into actionable result
4. **How many tickets have I dispatched, responded & logged?** View my productivity for dispatching tickets to the field








Historical charts in this dashboard enable further exploration of critical system activity data.

Out-Of-The-Box Reports






Intelligence Center offers various out-of-the-box reports to provide insight and answers to key business questions.

Report types




One Call Center Listing Reports provide information on daily averages and tickets received by One Call Center and ticket type.

One Call Center Listing Reports		
Report Categories	Report	Description
 One Call Center Listing		
 Productivity		
 Reasons		
 Ticket Listing		
 Worksheet		
	Daily Average	Daily Averages of Tickets Received by One Call Center.
	Ticket Type Summary	Summary of Tickets Received by Center Code and Ticket Type.

Productivity Reports provide insight into overall productivity by answering key questions related to ticket volume, actions taken and individual activity levels.

Productivity Reports		
Report Categories	Report	Description
 One Call Center Listing		
 Productivity		
 Reasons		
 Ticket Listing		
 Worksheet		
	Assignment Placement Summary	A summary of tickets assigned or put in folder within a date range.
	Assignment Placement Summary By Folder	A summary of tickets put in folder within a date range.
	Assignment Placement Summary By Locator	A summary of tickets assigned within a date range.
	Average Time To Locate	Average time to locate tickets received within a date range.
	Detailed Agency	Detailed Agency Report.
	Locator by County	A summary of responses entered within the locate date range grouped by Locator.
	Locator Productivity	A summary of responses entered within a date range grouped by Locator.
	Locator Productivity by Folder	A summary of responses entered within the locate date range grouped by Folder.
	Locator Productivity Detail	A summary of responses entered within the locate date range grouped by Locator.
	Simple User Productivity	A summary of key actions in the system for each user.
	User Productivity	A summary of key actions in the system for each user.

Reasons Reports help identify why specific actions were taken (or not taken) on a ticket.

Reasons Reports		
Report Categories	Report	Description
 One Call Center Listing		
 Productivity		
 Reasons		
 Ticket Listing		
	Total Tickets By Assignment Reason	The number of tickets received per reason.
	Total Tickets By OCC Assignment Reason	The number of tickets received per One Call.
	Total Tickets By Operator Assignment Reason	The number of tickets received per Operator.
	Total Tickets By Service Area Assignment Reason	The number of tickets received per Service Area.

Ticket Listing Reports help administrators understand the work performed by Locators and enable auditing of contract locators to ensure billing or tickets are being responded to in a timely manner.

Ticket Listing Reports		
Report Categories	Report	Description
One Call Center Listing	Closed Ticket Listing	All Closed Tickets grouped by Locator/Folder.
Productivity	Closed Ticket Listing By Folder	Closed Tickets searched and grouped by Folder.
Reasons	Closed Ticket Listing By Locator	Closed Tickets searched and grouped by Locator.
Ticket Listing	Contract Locator Audit	Tickets assigned to Contract Locators due within a date range.
Worksheet	Open Ticket Listing	All Open Tickets grouped by Locator/Folder.
	Open Ticket Listing By Folder	Open Tickets searched and grouped by Folder.
	Open Ticket Listing By Locator	Open Tickets searched and grouped by Locator.
	Past Due Ticket Listing	Past Due Tickets within a date range.
	Response Listing	Responses entered within a date range.
	Response Summary	A summary of responses entered within a date range.
	Ticket Screening Audit	Action taken and delivery time of tickets received within a date range.
	Tickets Received by Location	A summary of tickets received within a date range grouped by State.


Locator Worksheets accommodate Locators in the field without Internet access, enabling them to quickly process locates when they return to the office.



Worksheet Reports		
Report Categories	Report	Description
One Call Center Listing	Locator Work Sheet	A worksheet of all open tickets grouped by Locator/Folder.
Productivity	Locator Work Sheet By Folder	A worksheet of all open tickets for Folders grouped by Folder.
Reasons	Locator Work Sheet By Locator	A worksheet of all open tickets for Locators grouped by Locator.
Ticket Listing	Locator Work Sheet With Responses	A response worksheet of all open tickets grouped by Locator/Folder.
Worksheet	Locator Work Sheet With Responses By Folder	A response worksheet of all open tickets for Folders grouped by Folders.
	Locator Work Sheet With Responses By Locator	A response worksheet of all open tickets for Locators grouped by Locator.
	Response Call List	Contractor Information for tickets with responses entered on a specific day.

EXAMPLE BUSINESS QUESTIONS

- **How many tickets were not located on time?** View a list of tickets by One Call Center, registration code and time frame related to late tickets. This information can be used for corrective action, staffing, etc.
- **Are we staffed correctly to process tickets in a timely manner?** View daily averages by One Call Center and summary information of tickets received by center code and ticket type.
- **What's the productivity level of my team working tickets?** Understand each individual's ticket volume and subsequent actions taken by each.
- **Are my Contract Locators performing?** Audit any contract locator to see, for example, how many locates they perform, if they are locating on time and if billing information is correct.
- **Are we processing tickets in a timely manner?** View when tickets were received, what code was used, what action was taken and when it was delivered to the field.

- **Could we be screening tickets more efficiently and increasing productivity in the field?** Identify why a ticket is sent to the field to better understand reasons and guide corrective actions, if needed, to improve efficiency.


Past Due Tickets within a date range.

Date Type Due Date Time ▾
Date From 07 / 01 / 2012  Date To 07 / 11 / 2012 
One Call Center < All > ▾ Registration Code < All > ▾
Ticket Type Category < All > ▾ Folder < All > ▾
☐ First Version Only ☐ Exclude Weekends in number of days Past Due [View Report](#)

NOTE: The data available for this report goes back a maximum of 60 days.

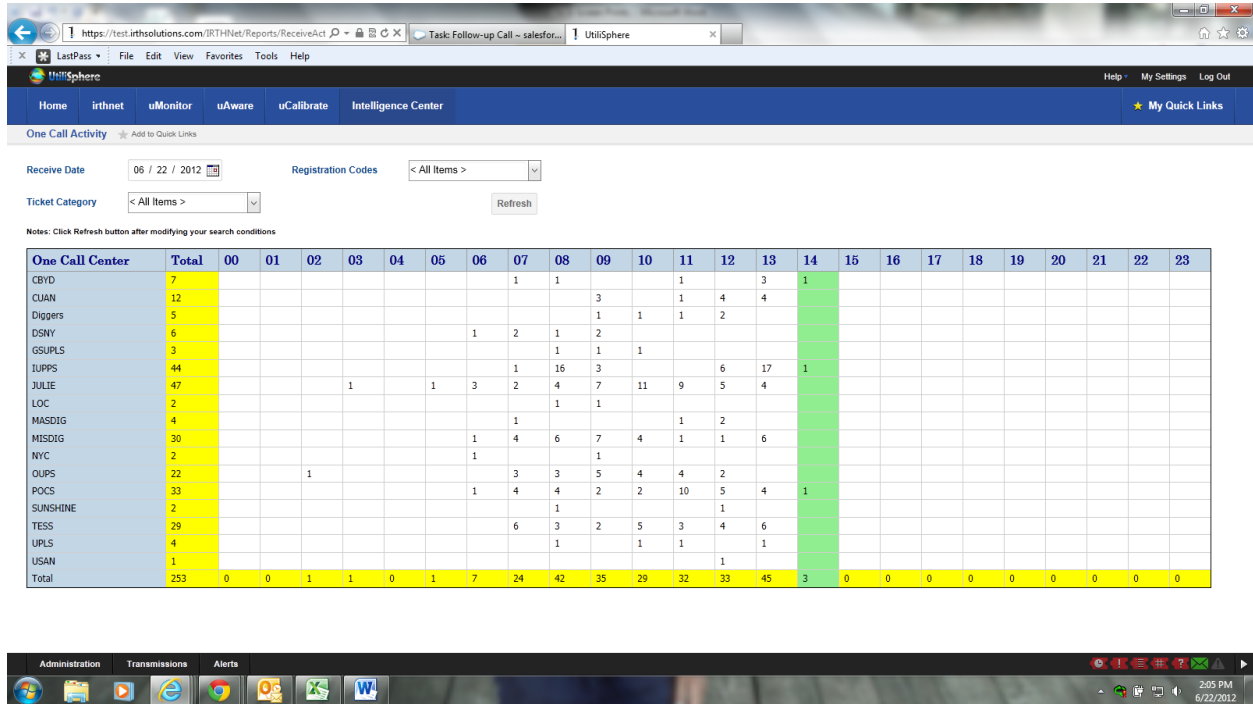
Past Due Ticket Listing
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Ticket ID	Code	Facility	Date Time	Locate Time	Past Due	Locator/Folder
06252-168-00	PRIN		07/09/2012 06:30 AM	07/09/2012 07:59 AM	1 h, 29 m	Anjila
06282-044-04	PRIN		07/02/2012 07:00 AM	07/02/2012 07:20 AM	20 m	Mark
06282-044-05	PRIN		07/02/2012 07:00 AM	07/02/2012 07:21 AM	21 m	Mark
06282-044-05	PRIN		07/02/2012 07:00 AM	07/02/2012 07:21 AM	21 m	Mark
06282-044-05	PRIN		07/02/2012 07:00 AM	07/02/2012 07:22 AM	22 m	Mark
06282-174-03	PRIN		07/03/2012 07:00 AM	07/03/2012 09:32 AM	2 h, 32 m	Anjila
06292-301-03	PR99		07/03/2012 11:59 PM	07/05/2012 02:20 PM	1 d, 14 h, 21 m	Paul
07022-040-00	PRIN		07/02/2012 06:49 AM	07/02/2012 06:58 AM	9 m	Judy
07022-044-04	PRIN		07/10/2012 09:00 AM	07/11/2012 11:47 AM	1 d, 2 h, 47 m	Robert
07022-145-02	PRIN		07/02/2012 10:43 AM	07/11/2012 11:40 AM	9 d, 57 m	Robert
07022-171-01	PRIN		07/02/2012 09:55 AM	07/02/2012 10:05 AM	10 m	Anjila
07022-520-03	PRIN		07/06/2012 07:00 AM	07/06/2012 10:57 AM	3 h, 57 m	Paul
07032-040-00	PRIN		07/03/2012 06:24 AM	07/03/2012 06:28 AM	4 m	Sharon
07032-145-00	PRIN		07/03/2012 08:16 AM	07/03/2012 08:24 AM	8 m	Anjila
07032-152-02	PRIN		07/05/2012 09:00 AM	07/05/2012 09:21 AM	21 m	Zoe
07032-252-04	PR99		07/06/2012 11:59 PM	07/07/2012 01:15 AM	1 h, 16 m	No Locator
07032-500-12	PRIN		07/09/2012 07:00 AM	07/11/2012 11:45 AM	2 d, 4 h, 45 m	Robert
07032-500-12	PRIN		07/09/2012 07:00 AM	07/11/2012 11:43 AM	2 d, 4 h, 43 m	Robert

Quickly view past-due ticket information so you can take appropriate action.

One Call Activity

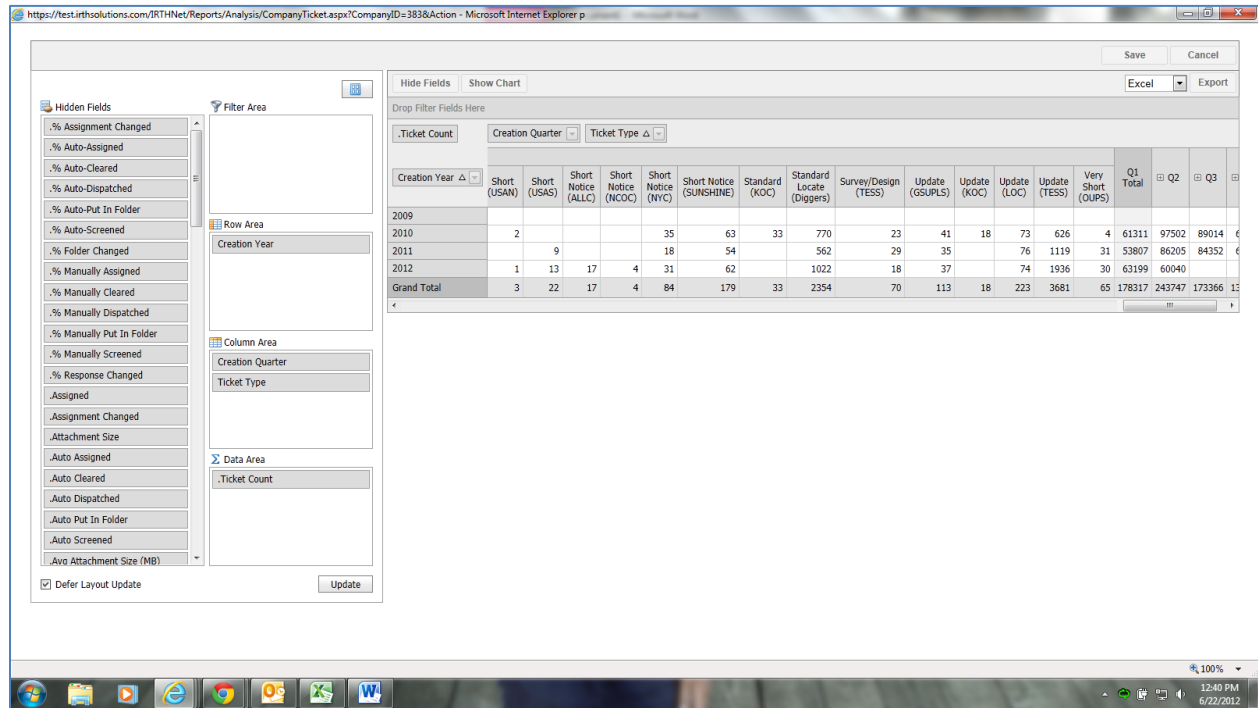
View real-time activity on tickets received from the One Call Center. Intelligence Center displays the number of tickets received per hour for each of the One Call Center, enabling companies to monitor tickets received and alerting them to unusual ticket volumes. This can help companies take action such as following up with a One Call Center, or adding additional staff during peak-times.



View real-time activity on tickets received from the One Call Center.

Self-Service Analytics

Intelligence Center features an ad-hoc data analysis platform that empowers users to access and analyze real-time data, driving better decisions and increasing collaboration, as it can be easily shared across teams. With an easy-to-use Microsoft Excel Pivot table-type interface, Self-Service Analytics provides quick access to information, enabling Administrators to respond to management requests without assistance from the IT department.



Build your own view for in-depth analysis suited to your unique business needs.

Conclusion

Data volume is only going to continue on a hyper-growth path in the energy and utility industry, driven by advances in technologies that monitor and manage essential distributed assets. Leveraging a business intelligence solution, such as UtiliSphere Intelligence Center, will enable energy and utility companies to harness the data volume and focus on answering the questions that improve system protection, safety and compliance.

The examples above illustrate how energy and utility companies are evaluating historical data for trend analysis and current data for real-time understanding. Going forward, business initiatives as well as government regulatory agencies will demand insight into the future.

The leading energy and utility organizations are assessing and managing the risk of distributed assets with business intelligence decision models and **irth** Solutions is leading the way by providing the platform to accomplish Intelligent Action for the most coveted assets.

As leaders in the industry, we at **irth** Solutions continue to constantly look at new ways to answer to the most critical business questions. We recognize that questions are always changing as the industry matures, so please engage us in a conversation about how we can serve your evolving business needs to further protect your distributed assets. To learn more about UtiliSphere Intelligence Center visit www.irthsolutions.com or contact sales@irthsolutions.com

About UtiliSphere

UtiliSphere™ is a business intelligence solution for the utility and energy industries. Leveraging our Software-as-a-Service (SaaS) platform, it transforms raw data into actionable insight for delivery system protection, safety and compliance. As an integrated platform, UtiliSphere collects, analyzes and reports on utility delivery system activities, such as ticket management, safety monitoring, public awareness tracking and much more. By using UtiliSphere, organizations improve system uptime, increase workforce efficiencies, ensure regulatory compliance and enhance public safety.

About irth Solutions

irth Solutions®, Technologies For Earth™, provides the leading business intelligence solutions to gas, oil, electric, telecommunications and other utility companies across the country to increase operational efficiency, improve workforce productivity, comply with regulatory requirements and ensure public safety. For nearly two decades, **irth** Solutions has processed thousands of billions of bits of data and has met the unique needs of each customer with unmatched service and ground-breaking system protection, safety, and compliance.