

IVR Performance Optimization with Tellme Platform Central

Intuitive Web portal provides detailed reporting, powerful analytics tools, and self-service telephony to help businesses optimize voice application performance and enhance customer experiences.

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Summary

While business today is anything but usual, one element has stayed constant: the reliance on the phone to deliver effective customer service. Realizing this, many businesses focus on optimizing call center processes. However, many businesses underestimate the potential impact of analyzing and enhancing the interactive voice response (IVR) portion of the phone experience.

The IVR is akin to the front door on the phone. Every caller encounters it and self-service callers interact exclusively with it. Ensuring it is optimized is crucial to delivering a positive caller experience. With the right metrics and tools, users can manage and analyze IVR performance, improving visibility and control. This way, businesses can make informed decisions about how to optimize IVR performance and measure whether the changes are delivering desired returns on investments.

Tellme Platform Central provides businesses with a single gateway to manage, analyze, and optimize their voice applications on the Tellme interactive voice response (IVR) platform. With secure, Web-based access, users benefit from:

Visibility and control

- Detailed reporting on standard usage and performance metrics
- Powerful analytics tools, including:
 - Call search
 - Caller segment comparison reporting
 - Phone type comparison reporting (wireless, landline)
- Self-service telephony provisioning

Security and flexibility

- Powerful encryption and privacy policies via Windows Live ID authentication
- Flexible user account management
- Anywhere access
- Intuitive user interface



Service elevator.

Raising the bar for on-demand voice services



Delivering the whole performance picture

Using the reports and call flow analytics tools in Platform Central, businesses can assess whether their voice applications are delivering desired results. Detailed performance data allows different kinds of stakeholders to monitor application key performance indicators (KPIs), identifying problem areas and opportunities for improvement. Reports yield insights into how successful callers are at completing desired tasks, while analytics tools allow users to investigate specific issues and test application changes.

Track performance with detailed reports

With a robust log processing and call summarization infrastructure, the Tellme IVR platform provides a broad range of telephony and speech reporting data. Businesses can use this information to measure their voice applications' efficacy in call volume, call containment, and task completion.

Users can take advantage of reporting groups to organize a set of phone numbers together for reporting. For example, a business may want to gather data on individual customer segments according to assigned phone numbers. Alternatively, they may want to see segment data rolled up together.

The reports in Platform Central include:

Platform Central Reports

- Inbound Calls
- Automation (Containment)
- Task Completion Rates
- Transfer Reasons
- Transfer Destinations
- Events
- Comparison Reports

- **Inbound Calls:** This report displays performance data such as:
 - Total number of calls answered
 - Total number of minutes callers spent in the voice application
 - Average call duration in seconds
 - Number of transfer attempts
 - Number of failed transfers
 - Number of application errors
- **Automation:** The automation report attempts to classify calls by containment rates, which are defined by the business user. Example definitions may include "full automation" (call was completely handled in the IVR) versus "partial" (call was transferred to an agent with its contextual data). Reported metrics include:
 - Total number of calls
 - Number and percentage of calls that were classified
 - Number and percentage of call that weren't classified
- **Task Completion:** This report displays metrics that are useful in determining whether callers were successful at completing tasks, or fulfilling their business objectives, in the IVR. Metrics include

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- Task name coded in the voice application,
 - Total number of attempts made to complete the task
 - Total number and percentage of calls that completed the task
 - Average call duration
 - Total number and rate of opt-outs
- **Transfer Reasons:** If businesses want to know why callers are transferring out of calls, they may specify a list of potential reasons and use this report to gather data about them. Examples may include special caller handling, account security flag, or API failure.
 - **Transfer Destinations:** The Transfer Destinations Report allows users to report on transfers made to other numbers such as a call center or another IVR. Metrics include:
 - Total number and percentage of transfers that connected to their destinations
 - Total number and percentage of transfers that did not connect to their destinations
 - Total and average number of minutes for bridged transfers
 - **Events:** This report displays the number of application events that occurred in a call, based on how many unique calls recorded the event and the total number of events found in the call logs.

Investigate details with analytics tools

Tellme Platform Central offers several basic call flow analytics tools that can help users drill into performance data, diagnose problems, fine-tune applications, measure improvements, and make more informed business decisions. These include:

- **Comparison reports:** With comparison reports, users can compare application data by time period, phone type, caller segments, or A:B tests. The data provides deeper insights into application and business performance. For example, users can compare call volumes in August to September, or compare transfer rates between mobile and landline callers. The results can help businesses focus their tuning efforts on the areas that will have the greatest impact on task completion rates and bottom-line outcomes.

Time period and phone type are pre-defined in Platform Central and include the following options:

- **Time period:** Today, last complete month, yesterday, last week, previous 7 days, user-defined date or date range
- **Phone type:** Landline, wireless, unknown



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Caller segments and A:B tests are user-defined and require appropriate log values in the application code.

- **Caller segments:** These are useful to understand the behavior of specific subsets of callers such as Gold, Silver, and Bronze customer account types.
- **A:B tests:** Also known as “control and experiment testing,” A:B tests allow developers to evaluate how tuning adjustments affect the performance of two versions of an application.

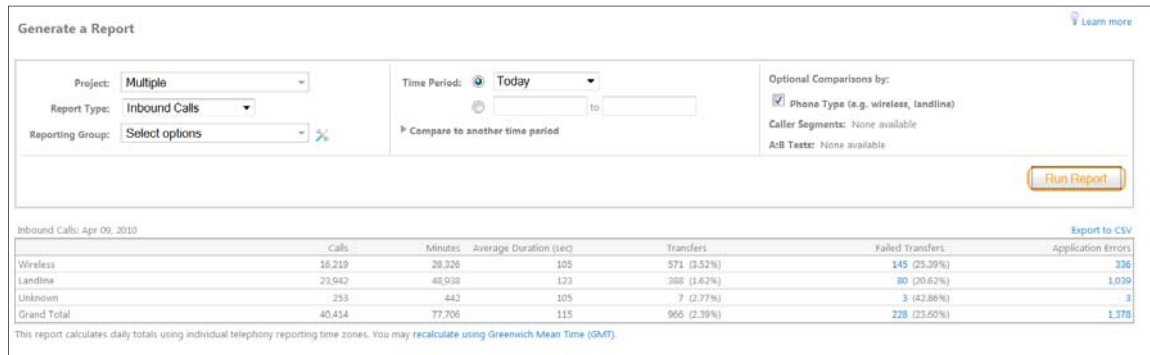


Figure 1 Tellme Platform Central allows users to compare application data by phone type, caller segment, A:B tests, and time period.

- **Call search:** The call search tool allows users to troubleshoot application and service issues, debug an application in development, and investigate a specific event. Data about recently completed calls—the project name, the number dialed, the caller’s number, and the time of the call—can be delivered in near real-time.

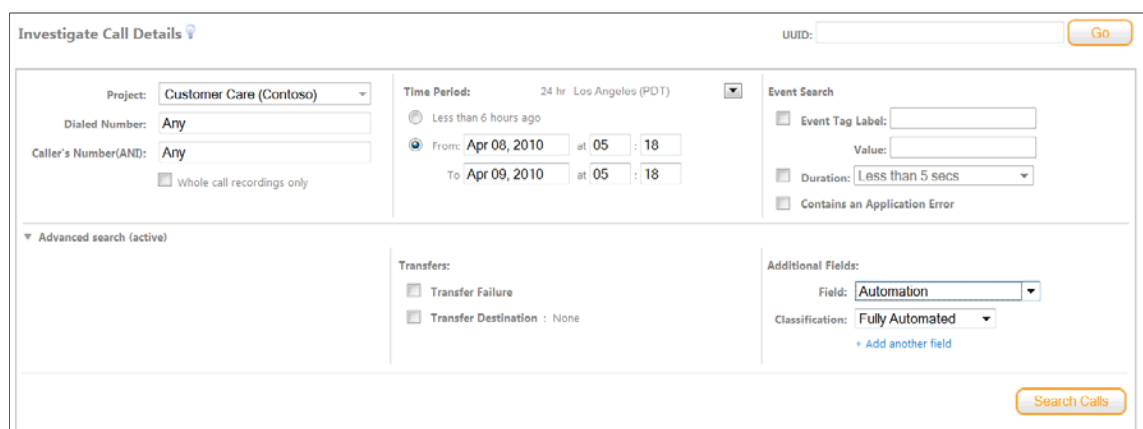


Figure 2 Call search allows users to troubleshoot caller issues and debug applications that are in development, testing, or production.

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After six hours, call data is indexed and stored for 60 days. This long-term data enables businesses to hone in on potential problem areas with more advanced search options, including:

- Event tags and values
- Call duration
- Recognition states
- Application errors
- Failed transfers
- Transferred destinations
- Automation levels
- Task names in an event log

Users may also limit their call searches to those in the last six hours or restrict them to a specific date and time range.

The screenshot shows the 'Investigate Call Details' interface. At the top right, there is a 'UUID:' field and a 'Go' button. The main search area is divided into several sections: 'Project' (set to 'Multiple'), 'Dialled Number' (set to 'Any'), 'Caller's Number(ANI)' (set to 'Any'), and a checkbox for 'Whole call recordings only'. The 'Time Period' is set to '24 hr Los Angeles (PDT)' with a dropdown arrow. Below this, there are radio buttons for 'Less than 6 hours ago' and a selected radio button for a date range: 'From: Apr 08, 2010 at 05:31' and 'To: Apr 09, 2010 at 05:31'. The 'Event Search' section includes checkboxes for 'Event Tag Label' (with a text input field), 'Value' (with a text input field), 'Duration: Less than 5 secs' (with a dropdown menu), and 'Contains an Application Error'. Below the search filters is an 'Advanced search' section with a 'Search Again' button. The results section shows '2 results found' and an 'Export to .csv' link. A table displays the search results with columns for Date, Time (PDT), Dialed Number, Caller, Duration, Nomatches, Status, Errors, and Details.

Date	Time (PDT)	Dialed Number	Caller	Duration	Nomatches	Status	Errors	Details
Apr 08	06:37	[REDACTED]	[REDACTED]	14 sec	0	Hangup	http,vxml	View
Apr 08	06:37	[REDACTED]	[REDACTED]	15 sec	0	Hangup	http,vxml	View

Figure 3 Call search results highlight no-matches and other errors, allowing users to debug application problems and promptly address customer issues.

Take control with self-service telephony provisioning

Flexibility is essential to ensuring Platform Central is a valuable resource for Microsoft customers and partners. The system's permissions-based architecture allows users to define project- and resource-level access. Ultimately, users can customize access and project management permissions in the way that works best for their business.

For example, users have access to self-service telephony provisioning, allowing them to configure their own TFNs and deploy changes in near real-time. They can choose to designate one person to be responsible for managing all their toll-free numbers (TFNs) and SIP URLs on the Platform or they can organize their TFNs into several groups that are managed by different people.

Depending on their permission levels, users can:

- Add phone numbers to an existing project, replicating parameters from an existing number or specifying a new set of parameters.
- Manage existing numbers and their parameters, including primary and backup application URLs, hosted error prompts, default transfer destinations, phone number descriptions, and reporting groups.
- Activate numbers to receive traffic or deactivate numbers from service. Deactivated numbers remain in the company's inventory, available for deployment later.
- Reassign a number and all of its data to a new project.
- Reuse numbers for a new project, while ensuring the current phone number's reporting data remains with its existing project.
- Remove a number from a project. The associated data will still be available for users to run historical reports on later.

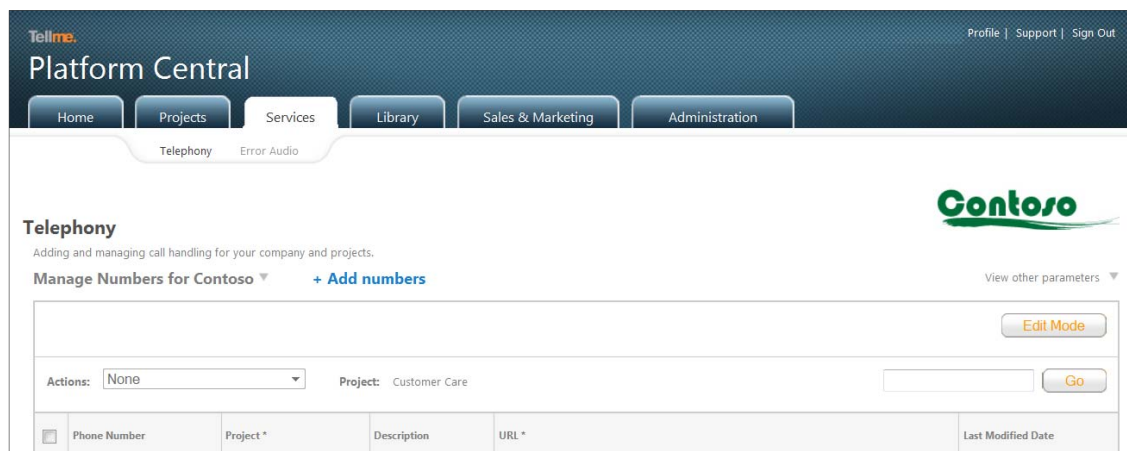


Figure 4 With Tellme Platform Central, users have access to self-service telephony provisioning.



Ensuring security and flexibility

When it comes to technology, security and flexibility are often mutually exclusive outcomes. Providing users with secure yet flexible control over an application is not easy and sometimes not feasible. Tellme Platform Central accomplishes both goals. The site's intuitive design enables easy interaction while ensuring data and resources are restricted to only those who require access.

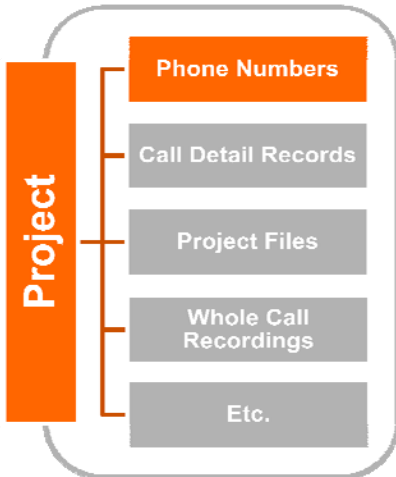
Simple and secure user authentication

Microsoft adheres to strict methods and policies to ensure the Tellme platform is safe, reliable, and secure. In keeping with this commitment, Platform Central employs several security practices to safeguard its customers' applications, including:

- **Single sign-on authentication:** Access to Tellme Platform Central is facilitated through the Windows Live ID identity and authentication system, which is highly secure and audited by an independent, third party. Users can only gain access to the site through an invitation from a project or company administrator.
- **Permissions-based user management:** During an application's lifecycle, various stakeholders will require different levels of access to Platform Central. This can be managed through the site's permission-based controls. Site administrators can limit user access to only the applications they manage, ensuring each control over each application and its data remain secure.

Platform Central organizes resources such as phone numbers and whole call recordings into groups called "projects." Access to these projects is governed by two types of site administrators:

- **Project administrator:** Project administrators have access to all the tools to manage their assigned projects. They may also invite users and manage user permissions within a project.
- **Company administrator:** Company administrators have the same privileges as project administrators, but may also add new projects and create, modify, and delete project administrators.



Tellme Platform Central groups resources into "projects," enabling secure access to application data and flexible reporting options.

Easy to access and use

Tellme Platform Central is designed to ensure maximum ease of use. Users can access the system from anywhere over the Internet.

The user interface is streamlined and intuitive, providing simple controls and quick access to reporting data and documentation. From the home page, users can view summaries of their projects, updates on quiet periods, and fast-track reporting and call search data. For detailed project information, users need only click on the Projects tab to begin their investigation. In addition, users can access helpful voice and data connectivity documents in the Library.

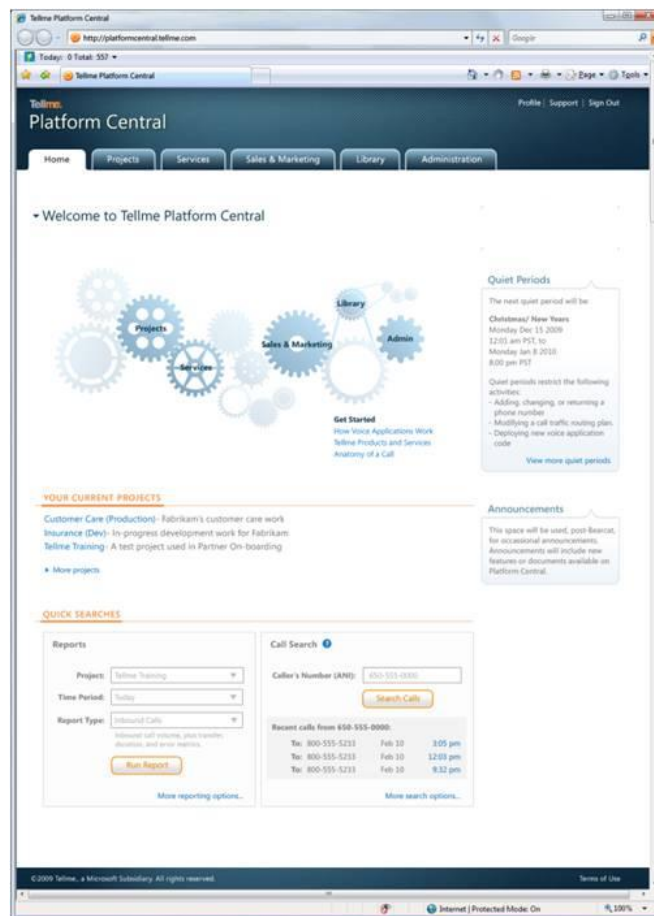


Figure 5 The home page on Tellme Platform Central provides project summaries, updates on quiet periods, fast-track reporting and call search data, and access to detailed project information and analytics tools.

Conclusion

Voice application performance affects customer experience and impacts satisfaction, loyalty, and revenues. Tellme Platform Central provides a secure, intuitive gateway to manage, analyze, and optimize application performance. Permissions-based management ensures secure access to application data, while also enabling flexibility around how application resources are managed. Reporting and analytics tools drive insights into customer interactions, arming businesses with the intelligence they need to tune applications, provision their TFNs, customize product and service offerings, change business processes, and, ultimately, maximize ROI.

