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# Annexing Multimedia to IT Service Management (ITSM)

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**ABSTRACT**
People and businesses can do bewildering things when technology bolts at its crème de la crème (meaning best). As amending requirements and expectations place new demands on IT. The time has come for a new perspective to service and support—one that is delineated to ameliorate and aid both people and their tools execute at their crème de la crème. Employees need a more mobile, social, and user-centric encounter, and they want to assuage the current situation of disentangling their own issues. IT requisites superior-integrated tools and automated processes to streamline service delivery. CIOs need the flexibility and agility to respond to emerging business requisites, accentuating the worth of IT throughout the organization. This paper instigates a new episode that embraces:

1) A superior way for users to ingress service and support anywhere, anytime—including facile-to-use self-service—with customized, intelligent, context and location-aware mobile tools

2) Exalted productivity for IT staff with facile collaboration and visibility across teams, streamlined service delivery, and efficient process automation

3) Seamless integration across IT operations management systems and processes to deliver a greater business impact.

This new IT affair succors people and businesses to execute their jobs at its crème de la crème.

***Keywords:-*** Collection, Audio input/output, Image/video retrieval, Electronic mail, Video, Voice I/O.

## I. INTRODUCTION

This project is focused at molding lives of support staff manager, support staff and end users using IT - who raise tickets – easier, buoyant and make this encounter to blend in the modern way of life – "Social, Mobile, Analytical and Cloud"!!!

We aspire to annex Multi-Media (Audio-Video) to ITSM Product for mobile phones which will bestow an interactive platform for raising and resolving incidents ensuing in creation of KB (Knowledge based) articles in Audio-Video format with the succor of Cloud services.

## II. ITSM and ITIL[1]

**ITSM:** IT Service Management (ITSM) is a process-based practice aspired to range the delivery of information technology (IT) services with requisites of the enterprise, accentuating benefits to customers. IT service management is an enabler of information management and governance objectives.ITSM involves a paradigm shift from managing IT as stacks of individual components to focusing on the delivery of end-to-end services using crème de la crème practice process models.

**ITIL:** IT Information Library bestows the leading set of crème de la crème practices for IT service management. It outlines important business processes and dispenses a flexible well-designed framework that can be tailored to the specific requisites of your organization. ITIL is a public domain set of crème de la crème practice books that define a comprehensive, consistent, and coherent process-based framework for IT

Service Management. The U.K. government's Central Computer and Telecommunication Agency (CCTA) developed it in the late 1980s. The UK's Office of Government Commerce (OGC) now superintends its content.

ITIL is a framework of crème de la crème practices that can be used to assist organizations in developing their ITSM process-driven approaches. It is a guide for instituting common processes, roles, and activities, with apt reference to each other and how the communication lines should subsist between them. It is not a methodology. Organizations can manouevre ITIL either in whole or in part, influenced by their predilections.

ITIL bestows guidance on how to link subsisting processes and activities across IT departments in a structured context, and this linkage is key to eminent service delivery. The models imparted in ITIL show the goals, general activities, inputs, and outputs of the assorted processes that can be tailored to the organization's requisites. The intent is to institute a common language across functional areas. ITIL complies with requirements for ISO9001 quality standards and is referenced by ISO9000 for IT standards.

## III. MARY[2]

MARY is an open-source, multilingual Text-to-Speech Synthesis platform formulated in Java. It was initially developed as a collaborative project of DFKI's Language Technology lab and the Institute of Phonetics at Saarland University and is now being supervised by DFKI.

As of version 5.0, MARY TTS supports German, British and American English, Telugu, Turkish, Russian and Italian; more languages are in preparation. MARY TTS comes with toolkits for quickly annexing support for new languages and for building unit selection and HMM-based synthesis voices.

## IV. ANDROID[3]

Android powers hundreds of millions of mobile devices in more than 190 countries around the world. It's the largest installed base of any mobile platform and growing fast—every day another million users power up their Android devices for the first time and start looking for apps, games, and other digital content.

Android gives you a world-class platform for creating apps and games for Android users everywhere, as well as an open marketplace for distributing to them instantly.

## V. REST API[4]

REST stands for Representational State Transfer, and it was proposed in REST stands for Representational State Transfer, and it was proposed in a doctorate dissertation. It employs the four HTTP methods GET, POST, PUT and DELETE to execute different operations. This in contrast to SOAP for example, which creates new arbitrary commands (verbs) like getAccounts() or applyDiscount()

A REST API is a set of operations that can be invoked by means of any the four verbs, using the actual URI as parameters for your operations. For example you may have a method to query all your accounts which can be called from /accounts/all/ this invokes a HTTP GET and the 'all' parameter tells your application that it shall return all accounts.

**Representational State Transfer (REST)** is an architectural style consisting of a coordinated set of constraints applied to components, connectors, and data elements, within a distributed hypermedia system to achieve desired architectural properties. REST ignores the details of component implementation and protocol syntax in order to focus on the roles of components, the constraints upon their interaction with other components, and their interpretation of significant data elements.

The term representational state transfer was introduced and defined in 2000 by Roy Fielding in his doctoral dissertation at UC Irvine.

REST has been applied to describe the desired web architecture, to succor identify subsisting problems, to compare alternative solutions, and to ensure that protocol extensions would not violate the core constraints that make the Web successful. Fielding employed REST to design HTTP 1.1 and Uniform Resource Identifiers (URI).

The REST architectural style is also applied to the development of Web services, as an alternative to other distributed-computing specifications such as SOAP.

The REST APIs bestow an alternative to the Java APIs utilized by in-process plugins. The REST APIs impart greater change-tolerance than in-process APIs. Before starting a plugin project, it's a good idea to start by looking at the REST APIs, even if you are developing a plugin aspired to operate in-process with the host application. Of course, it's also the crème de la crème option for developing remote applications that ingress Atlassian platform services. JIRA Studio is one example of such an application.

## VI. PROPOSED SYSTEM

As specified earlier, this project is focused at molding life of support staff, support staff manager and end users who raise tickets – easier, buoyant and make this encounter to blend in the modern way of life – "Social, Mobile, Analytical and Cloud"!!!

1. **Reporting:** Sample reports like weekly Report for Help Desk Manager on Help Desk Tickets, monthly Reports for CIO for the Services and many other types of Reports. We aspire to deliver these reports in Audio-Video formats.
2. **Notifications:** Sample Notifications like ticket is assigned to Help Desk User or Approval Notifications for Managers will be delivered on Android based Phones / Tablets.
3. **Approval Central**: We aspire to bestow more information related to request for approval from the text based ticket as audio/video stream. There is Approval Central platform in BMC ITSM product line from where, Managers can Approve / Reject requests.
4. **Audio based Knowledge based article creation:** We want to enable support staff to record their KB article from mobile devices and then they can get attached to the ITSM systems. These can be stored on cloud; we will just store the link to download/stream these audio files from cloud.
5. Service Requests / Incident creations from the mobile and annex audio information to it.

In the Proposed architecture, we have different modules as follow:

**REST server:** The REST server fetches information from Remedy ITSM System through methods like:

- GetIncidentsAssignedtoMe()
- GetRequeststobeApprovedbyMe()

This data is in object format. The REST server sends this data to REST client as per request.

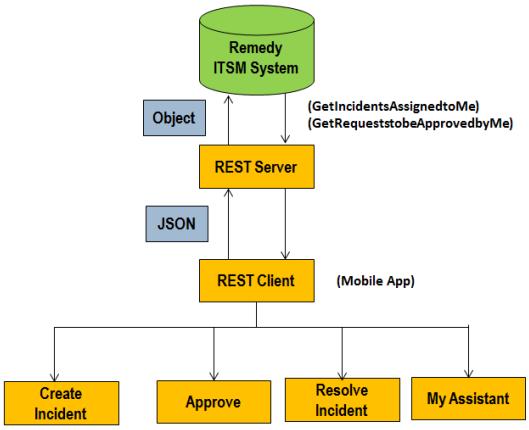


Fig. 1. Architecture

**REST Client:** REST client takes data from server through JSON parsing, thus creating JSON objects. Rest Client is basically residing on the mobile application which mainly bestows the four tasks:

**1. Create Incident:** Using this, the end user can create an incident through his mobile application which describes the problem or issue. He can use multimedia options like Capturing an Image, Recording Audio, Recording Video for superior understanding of the problem.

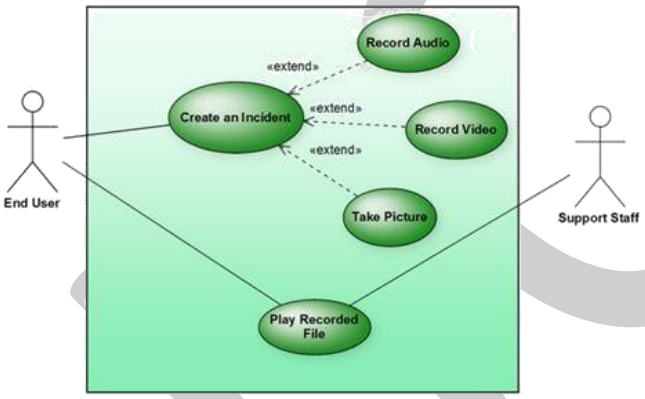


Fig. 2. Creation of an Incident

**2. Approve:** This option is bestowed for the support staff manager through which he can get details of the critical incidents in text format also he can listen to the audio summary. By understanding the scenario, he can approve or reject the request by just clicking a button.

**3. Resolve Incident**: This module succors the support staff who solve the raised incidents (tickets) by showing a list of incidents raised by all employees. They can select a particular incident get the details of it. For providing the solution, support staff also can use the same multimedia options which are

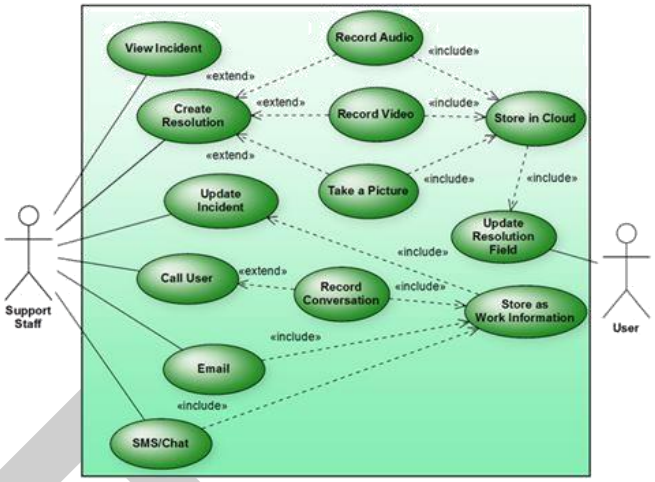


Fig. 3. Resolving of an Incident

bestowed for raising incidents. Thus providing solution becomes faster and time saving.

The solution bestowed in multimedia format is stored on the cloud to save the local space on mobile device and is also employed as KB article for future references.

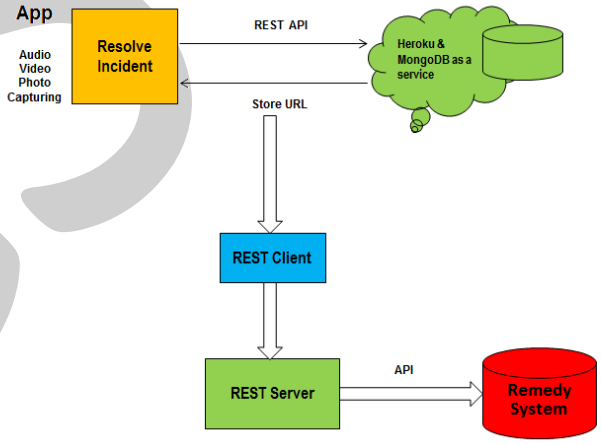


Fig. 4. Detailed Architecture

i. **4. My Assistant:** Here the employer can ask for assorted services he want and his voice is converted in to text data. This data is utilized in searching for assorted options which can be succored in providing solution. The list of diverse available options is shown with the confidence level of each option and an execute button. By clicking this button of selected option the service gets executed.

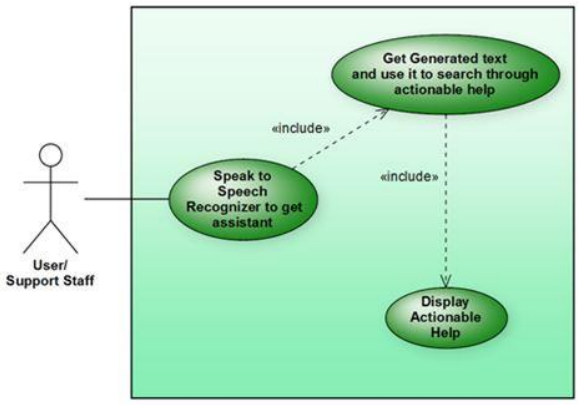


Fig. 5. My Assistant

## VII. CONCLUSION

By embracing ITSM with multimedia and making it mobile, ITSM can succor users become more productive while achieving the efficiency to deliver solutions for the problems of users and creating the KB articles. The performance of ITSM increases as operations like storing KB articles are done quickly just by clicking a picture or recording a video. Acceptance or rejection of projects is done quickly as compared to the current pace. By succoring ITSM keep technology running at its crème de la crème, the new ITSM episode empowers support staff and end users to uncover possibilities and realize their full potential.

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