DTI Cloud Explained

DTI Cloud is Digital Technology International's cloud computing strategy for providing Software as a Service (SaaS). It includes the hosting and provisioning of application modules and data services, and encompasses the full suite of innovative DTI™ multimedia solutions.

The software applications, servers and IT infrastructures are managed by DTI, leaving our customers to gather and publish content – with their capital left in their core businesses.

Other advantages of *DTI Cloud* are that it provides reduced cost due to economies of scale, rapid implementation, system scaling on-demand, and more security built-in than any newspaper could normally afford to implement. It also enables media organizations to respond rapidly to the changing demands of digital news publishing, without large up-front capital outlay. They can add online software and services on-demand, and pay for them while receiving the financial benefits.

Just as newspapers need to change and adapt to the changing market, we must also change and adapt our business models to provide the solutions, value and flexibility that our customers need. It is our expectation that *DTI Cloud* will be the long-term future of DTI.

Application and Database Architecture

DTI Cloud uses composite applications created from our current on-premise product offerings, including circulation, advertising, editorial, and Web.

The composite application is connected via Ensemble, InterSystems Corporation integration engine that ties together our entire product suite forming one unified multimedia solution – whether for a small, or large enterprise-wide news organization. InterSystems Ensemble™ is a rapid integration and development platform. It enables DTI to develop superior applications that link with multiple systems and processes, and enhance them with a rich Web interface, adaptable workflow, rules-based business processes, and other complex features that today's news media businesses need in order to remain competitive.

The new unified browser-based front-end lies on top of our current product suite, interconnected by Ensemble. The result is a composite application that creates one hosted solution, even though one module may use a different technology to another.

A 'composite' layer over the entire DTI product suite ensures a consistent single application presentation to the end user. Each module will feature the

same newly designed and easy-to-use professionally designed GUI. For this, to make the user experience efficient and intuitive, DTI has employed the services of Rocket Communications, the company that created GUI's for other leading companies such as Apple, Microsoft, Yahoo!, HP, AOL, and eBay.

Within each module, users will assume one or more 'roles' based on the tasks being undertaken at any one time. This may depend upon the size and make-up of the organization. For example, within the *DTI ContentPublisher* solution, there are 'editor' and 'reporter' roles. One person may be both, or either. Functionality available to the user is associated with their login details.

Performance

In order to create a SaaS data architecture that is both robust and 100% secure, and to satisfy even those most concerned about surrendering control of mission-critical content and processes, we have chosen to partner with Internap. Network redundancy ensures optimal delivery of all your content, and Internap's high-performance Internet solution utilizes patented route-control technology to dynamically identify the best path for our applications and your data with a 100% uptime guarantee.

Configuration

In line with the SaaS model, and to minimize cost, all customers will use the same software version. Small incremental upgrades to this version will be made as they become available, with larger upgrades being made less often. Above all, the emphasis will always be placed on maintaining a stable system, and upgrades will always be considered in this light.

Standard levels of configurability are however available in each module enabling customers to customize and personalize their applications. Over time, standard configuration wizards will be added to *DTI Cloud.*

The goal of a configuration wizard is to ask business-specific questions and to create complex application configurations based on the answers to these questions. This approach will help DTI and our customers to streamline the configuration process.

DTI Cloud will follow SaaS best practices and be as self-supporting as possible. Future releases will include a searchable Knowledge Database and on-line recorded tutorials. In addition, 'Customer Comment' areas will be incorporated into the new GUI at every opportunity to allow DTI to gather customer feedback.

Application Security, Tenancy and Privacy

DTI provides *DTI Cloud* under single tenancy, allowing customers more flexibility and security. Along with other large organizations, we believe that publishers also appreciate the ability to deploy on-demand applications with their data stored separately from other customers' data. It also allows DTI to more readily overcome potential concerns stemming from interpretations of USA's current 'SOX' public accounting and other compliance requirements.

In addition to being single tenant, we also provide multi-instance. Beyond the security and compliance implications, the multiple instances allow for flexibility in timing maintenance and upgrades. By maintaining a separate copy of software for each customer, single tenancy will also allow us to more easily perform routine maintenance during the small windows of opportunity allowed by time-critical news publishing. This approach enables us to perform upgrades in a controlled fashion, rolling them out gradually, even individually.

Rather than creating and maintaining multiple copies of unique code sets however, each copy of software will have the same code set. This is extremely important to ensure that we do not perpetuate the on-premise model of expensive custom extension code, custom processes and custom data extensions. Customization is now achieved in a more standard way through configurability.

Single tenancy is intrinsically secure because each customer's data is physically isolated. Users are only able to access their individual database through the application layer (that is, they do not have direct access to the hardware or the database engine). Access to the application is controlled through password protected individual user accounts.

In addition, each customer as well as DTI Support personnel are required to access their application through a VPN (Private Virtual Network) connection to the data center. This VPN connection serves to encrypt the data as it crosses the Internet, and further segregates each customer's data, such that access to the applications will only be possible when connected to the proper VPN. Thus, even if an individual user account is compromised to another customer, that customer could not make use of the account without also having access to the proper VPN connection.

If you would like to learn more, or attend a Webinar, please contact: info@dtint.com.

NOTE: The DTI SaaS offering name has been taken from the term 'cloud computing'. InfoWorld describes cloud computing as follows: "cloud computing comes into focus only when you think about what IT always needs: a way to increase capacity or add capabilities on the fly without investing in new infrastructure, training new personnel, or licensing new software. Cloud computing encompasses any subscription-based or pay-per-use service that, in real time over the Internet, extends IT's existing capabilities."