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AN OVERVIEW OF AZURE LOGIC APPS

In the lifecycle of every enterprise, there comes a time when they end up with an ecosystem of disparate systems. The decision to digitally transform to an integrated system invariably stumbles in the face of practical considerations, cost-benefit analysis, and business priorities. To set the complex integration challenges right, we have Microsoft Azure combined with logic apps, to improve your business and amaze your customers.

INDEX

Key Takeaways:

- Microsoft's Azure Logic Apps makes the job of developers easy
- This iPaaS makes rich integration possible
- Integrations are scalable, and stored in the cloud
- Offers practical solution to update systems in real-time
- Automated workflows possible through browser
- The drag and drop component creates workflow and connects APIs easily
- Integrates with Azure Biztalk and MS Operations Management Suite on cloud
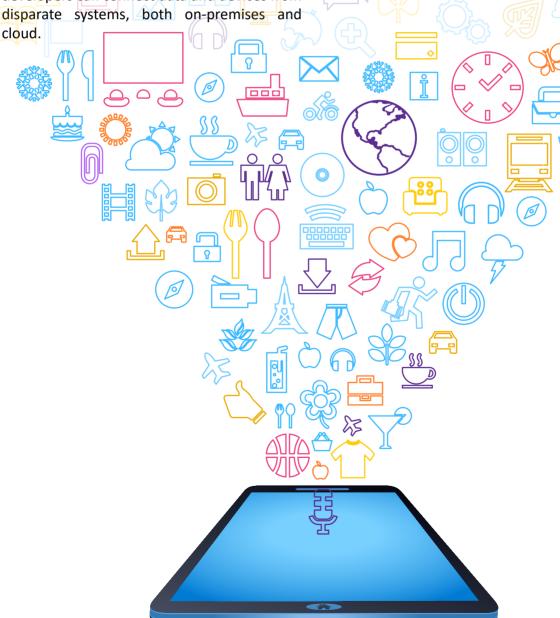
WHAT'S THE NEED OF AZURE LOGIC APPS?

Almost all the enterprises touch five or more different systems with different dependencies. To be digitally ahead, it is vital to inter-connect existing systems with best-of-breed cloud and distributed apps through APIs and uncover these systems to other systems or business partners.

Microsoft's Azure Logic Apps is in essence, an 'Integration Platform as a Service' (iPaaS). It offers an easy and practical solution to update systems in real-time. Using these apps, developers can connect data and devices from disparate systems, both on-premises and cloud.

The Azure Logic app creates automated workflows to connect legacy and modern systems easily. An easy-to-use visual designer facilitates pulling in data from various sources to trigger the required actions. Logic Apps also equip developers with a robust set of capabilities, making it easier to get insights from all connected systems, unlock data from behind the firewall, securely connect to cloud-based services and support business managers to take informed decision.

COMPONENTS OF AN AZURE LOGIC APP

An Azure Logic app essentially has four basic constituents: workflow, trigger, connectors, and workflow definition language.

- Workflow models the business process in a series of graphical steps. It can automate tasks, or execute a task when end-users select a particular option. For instance, if an item in the syphon list is modified, designated persons are intimated through email.

- Trigger or an event starts the workflow. For instance, updating a record triggers a workflow, which leads to proessing orders, collecting payment, and delivering the items to the customer's address. Each step that follows the trigger, in a domino effect, is a workflow action.

- Connectors that help Azure Logic Apps to access the required data and service, enable the workflow to proceed to its logical conclusion. For instance, when there is slack, the workflow instruction may be to "post a message." The connector attached to the "slack" enables the system to communicate the required message to a slacks channel.

- Workflow Definition language contains actual logic integral to the logic app, based on which the workflow proceeds. It co-opts one or more triggers, and comprises of different elements such as parameters, triggers, actions, and output.

HOW THE APP WORKS?

Azure Logic App's easy-to-use editor creates workflow by dragging and dropping various components into the pane, and connects APIs just as easily.

Several readymade connector templates; connect CRM to Salesforce, Salesforce to SQL integration, and make the task easier and quicker for social media channels such as Facebook and Twitter. Users may also create new web APIs easily to serve as connectors for services without readymade connectors. Developers may create the required API and host it in Azure with just a few mouse clicks, and integrate such newly created connectors to the app just as easily. Developers also have the flexibility to host such connectors on any other cloud platform, and integrate it to the Azure Logic app seamlessly. All exchangeability is inbuilt, leading to a high level of robustness and performance.

HOW TO CREATE A LOGIC APP USING THE AZURE PORTAL?

Creating an Azure logic app is pretty straightforward. Log into the Azure portal, search for the logic app, and select the option to start a logic app. Give a name to the app, select the required subscription and the resource group.

After creating the logic app, and deploying it in the required resource group, design the workflow using the inbuilt Logic app designer.
Designers may use readymade templates and connectors, or build from scratch using a blank template, depending on the business requirement. For instance, there is no inbuilt support for LinkedIn connectors, therefore either the Azure team develops one, or creates a custom one.

The next step is to give the necessary command to execute the tasks in the workflow. For instance, to publish an RSS item, input the URL of the feed, and fill in the required settings such as frequency of update, follow-up action such as sharing a newly published blog through Twitter, and more.

The code view option switches over to the back-end, making the various parameters, triggers and actions visible, allowing developers to view the logic app workflow definition language. Clicking on overview makes explicit the various properties, how many times it is running, the trigger, and more. Developers can make tweaks and changes here, easily.

HOW TO CREATE A AZURE LOGIC APP USING VISUAL STUDIO?

It is possible to create Azure Logic App from Visual Studio as well, by installing the Logic App Tools extension. The advantage of taking the Visual Studio Designer route is the ability to effect version controls, as long as the system is online.
Creating a new project using Visual Studio is as straightforward as creating one using the Azure website. The process is similar, involving signing into Azure, selecting the option to start a new project, and then selecting a blank or any of the readily

available templates, as required.
The next step is to fill in the requisite details using the Logic App designer, available in the JSON as an icon. Select the resource group to save the design. The developers may select from the list of readily available connectors, or choose to populate the workflow with their custom connectors.
Just as in the Azure portal option, switching to code view makes explicit all the back-end workings, allowing developers to make the necessary tweaks or changes easily.

AZURE LOGIC APPS IN ACTION

The range of possibilities with Azure Logic App is vast.

Consider one possibility of sentiment tracking. Enterprises conscious about what is being spoken about them in social media could track sentiments through a Logic App, very easily. The developer creates a logic app, switch to the designer view, and use a Twitter connector to look for tweets with the required hashtag, configure the frequency to search, say, every three minutes. The developer could then apply text analysis, using the Azure cognitive services to detect the sentiment and use another Azure function to extract the key phrases. Applying Azure cognitive services is a straightforward process, without any complications.

The developer also needs to create a streaming Power BI dataset, with key phrases to convert the phrases into a string and quantify the sentiment. The workflow in the

Logic app may be configured to extract the key phrases, convert it into strings, and run the data through the dataset, to give a value to the sentiment. The assigned value to a string can be linked to any particular sentiment. For instance, the value may be 0 to 1, with a lower value indicating dissatisfaction and higher value indicating satisfaction.

The process will also make explicit various details such as the tweet posted, who tweeted it, the location of the tweet, and allowing the enterprise to take any required action. Such sentiment analysis will for instance, allow a customer relations team to respond and take immediate remedial follow-up action on a tweet by an aggrieved customer.
Adding a line chart correlating time and sentiment score, and multiple other visualizations, make it very easy to conduct an analysis.

WHY USE AZURE LOGIC APPS?

While the tasks facilitated by Azure Logic Apps can be done even otherwise, Logic Apps simplifies the process, and brings the power of what has been a premium functionality to the masses. Using Azure Logic Apps deliver the ability to leverage Azure's large ecosystem of software as a service (SaaS) and cloud-based connectors. Readymade connectors exist for Salesforce, Office 365, Twitter, Dropbox, Google services and more, with new connectors added to the Azure Marketplace all the time.There is also the added benefit of being able to leverage the power of Azure services such as Machine Learning and Cognitive Services.

Using Azure Logic Apps makes rich integration possible, without having to put up with the hassles associated with migrating from on-premises systems. Hitherto, created automated workflows were a convoluted process, requiring an editor and an environment. Azure Logic apps make this possible through the browser, with no other tools required, and without having to worry about scaling, patching, and other hassles. All these tasks are performed automatically by the Azure engine, in the backend, with the developer the least bit inconvenienced or bothered. The integrations performed using Azure Logic

Apps are scalable, and stored in the cloud.

Small and medium businesses get an added benefit of being able to seamlessly integrate Microsoft Operations Management Suite, making it easier for them to work with partners, view and troubleshoot transactions related to Electronic Data Interchange (EDI) standards. Larger enterprises also benefit through such integration, as they can take advantage of the scalable benefits the cloud brings, for B2B messaging and other tasks.

Logic Apps also makes it possible to start

Azure BizTalk Server processing from the cloud. This allows businesses to take advantage of existing processes implemented with BizTalk Server, keep data on-premises while integrating with cloud-based processes. Readymade adaptors to SalesForce.com, SharePoint Online and other SaaS-based applications enable BizTalk Server to invoke Logic Apps seamlessly, and keep data on-premises even when reaping the advantages of cloud-based integration, the best of both worlds.

IS AZURE LOGIC APPS REINVENTING THE WHEEL?

One might mistake Logic apps as reinventing the wheel, especially since it bears some similarity to MS Flow. However, the similarity is only superficial. While both share the

same workflow design and connectors, MS Flow is basically intended for business users whereas Logic Apps are intended for developers.

PRICING

When running an Azure logic app, every action is priced. Azure offers two pricing models: a conventional app service plan and

a conceptual plan. Users may evaluate the plans and choose one that best suits their business model and usage pattern.

ABOUT SUYATI

Suyati provides marketing technology and integration services for companies that wish to combine the best of breed solutions and create a unified approach to customer acquisition. This unified digital marketing approach requires system integration between various CMS and CRM platforms, and a slew of eCommerce, Marketing Automation, Social Media Listening, email and social marketing, and customer service systems. Our specialized knowledge in Salesforce, open source and .Net based systems enables us to build effective custom integrated solutions for our clients. Suyati's custom technology solutions have been deployed in companies in the US, Western Europe and Australia, and have helped many enterprises leverage the web/cloud/mobile technologies to acquire customers through integrated digital marketing. Suyati is based in Chicago with product engineering capability out of the US and India.

MORE AT: www.suyati.com
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REFERENCE

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- *https://www.youtube.com/watch?v=Jkk_GDY5zQ8&t*