CorasWorks® | CAPS

CorasWorks Application Service (CAPS) Overview

What is CAPS?

CAPS is designed to make application architectures easier to design & maintain, by virtue of providing a REST-like interface for interacting with SharePoint.

It also makes implementation faster by reducing, or even eliminating, the need for connecting multiple modules (i.e. web parts) to create a solution. It's the evolution of the web part model, much in the way SP2013 is app-based, but available today, on SP2010, with CorasWorks.

What is a REST-like service?

REST is software architecture, or design paradigm, that is commonplace as a model the Web uses for APIs.

Generally speaking, REST-like means the Service in question provides a common interface that exposes and defines the operations available within that Service. The design affords scalability as well as independence from any components that consume the data the Service surfaces.

Who derives benefits from CAPS use in SharePoint based solutions?

Your entire organization will see the benefits of CAPS. IT staff benefit because:

1. It further empowers savvier end users to build their own solutions or widgets
2. CAPS has a smaller footprint, so it's less to install & less pieces that have to run or be maintained

Builders and developers benefit because creating rich, interactive applications on SharePoint becomes faster and easier.

The user community benefits from:

1. Improved performance
2. More powerful capabilities that can be brought to bear by application designers and solution

Where does CAPS fit with SharePoint 2013?

CAPS can be installed and used in organizations running SharePoint 2013 with an on-premise or hybrid-model. Support for and externally hosted service that can be run as an Azure service is under development.

CAPS powered solution example

Most any application would benefit from CAPS since the benefits compound as a solution gets more complex. A couple of solution examples that would benefit are:

1. A solution that aggregated data from multiple sites/lists, especially if the aggregation needed to be conditional or dynamic based on criteria set at run-time
2. Any solution that required interacting with multiple inter-related Lists/Libraries

In classic application architecture CAPS represents the "data access" layer - providing the interoperability between the raw data (SharePoint Sites, Lists & Libraries) and the UI. Unlike the native web services, which don't support Claims authentication, the native REST service, or the CSOM, CAPS provides a cleaner and more efficient way to interact with SharePoint through any UI whether it is web part-based (i.e. CorasWorks Grids/Calendars/Charts) or completely custom (i.e. the CorasWorks Task Board, the CorasWorks Feature Designer, etc).

CorasWorks Project Portfolio Management uses CAPS – How does it benefit?

First and foremost PPM receives a significant performance boost, especially at the Portfolio/Program Dashboard layer. Aggregation and transformation of potentially large amounts of data from multiple sites **showed up to a 10x improvement when using CAPS vs the legacy model.**

CAPS enabled a more flexible architecture, freeing the List and Library architecture from limitations imposed by what was possible with the base web parts. The **deployment of PPM itself has become both easier and faster** by reducing the number and size of Site Templates required.

Finally, **CAPS allowed for design & implementation of new features**, like the Task Board, that would've been more difficult and had more overhead if created without CAPS.

Can any solutions benefit from CAPS or only ones from CorasWorks?

In that spirit of a REST-like service, CAPS could be used for any solution.

By providing an extensible Service, a solution builder is empowered to readily interact with data within SharePoint. By supporting both XML and JSON outputs, the "consumer" of the data is free to create any UX/UI they want. Much in the way that most popular Web APIs work, the data is easily surfaced in an interoperable format allowing the developer to focus more on the application requirements and user experience and less on creating the connections between their application and the underlying data.

In short, CAPS empowers solution builders, web designers or similar power users, to build applications with the sophistication normally requiring a more advanced skill set, if not full-on .Net development.

How do I learn more about CAPS and CorasWorks?

Contact CorasWorks today by calling 866.580.3115 or emailing info@corasworks.net. You can also visit the CorasWorks web site to schedule a conversation with our team to learn more about how CAPS and CorasWorks can benefit your SharePoint solutions.