

StratML Portal - StratML Exchange - StratML Master Repository

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Introduction

In prior work we touched upon topics such as how Strategy Markup Language (StratML) could be used in the private and public sectors. The primary goal of this piece is to promote an open-standards route, along with employing new technologies to better leverage StratML's numerous capabilities that include sharing, indexing, referencing, discovery, reuse, and analysis of embedded elements within these plans, along with the names and descriptions of stakeholder groups. The foundation of the series, StratML: Private & Public Sector Uses report was meant to expose where the technology may be leveraged, and this new document presents a roadmap on how it may be deployed in the Enterprise.

Systematic Progress

In the vision of a true agnostic landscape, building to open-standards (e.g., OASIS, W3C, ANSI, etc.) enables technologies to better work and coexist with one another. While a long and arduous process the open-standards route seems to make a great deal of sense in deploying large-scale IT solutions. It is also expected that open, machine readable standards like StratML will be the rule, rather than the exception in deploying these types of large-scale solutions in heterogeneous environments. At this point in time StratML Parts 1 and 2 are American (ANSI) national standards and Part 1 has been approved as an international (ISO) standard. In the scheme of things taking an open-standards route should make it easier for entities to exchange ideas, create strategic agreements, and access these agreements from any part of the world via concepts such as the StratML Portal, StratML Exchange, and StratML Master Repository.

The StratML Portal

As with any portal many factors must be taken into consideration such as the intended user, services offered, hosting model, and security. There is little question that a solid understanding of Enterprise Architecture (EA) & Service Oriented Architecture (SOA) will be of great value, but also an acute understand of how technologies that focus on registry creation, messaging, and security play into the mix. Below is a summary of the aforementioned factors and what impact they have on the overall deployment.

User

The term "user" can a bit nebulous and is too often taken at face value. However, the term "know your customer" is really critical here. Accordingly, the primary goal in this case is to better understand the profile of a StratML user and offer them an attractive list of services, which support the 'A worldwide web of intentions, stakeholders, and results' theme. Accordingly, a StratML user by definition could be a person representing and private or public entity interested in crafting a strategic agreement with another entity that shares common goals and interests.

Services

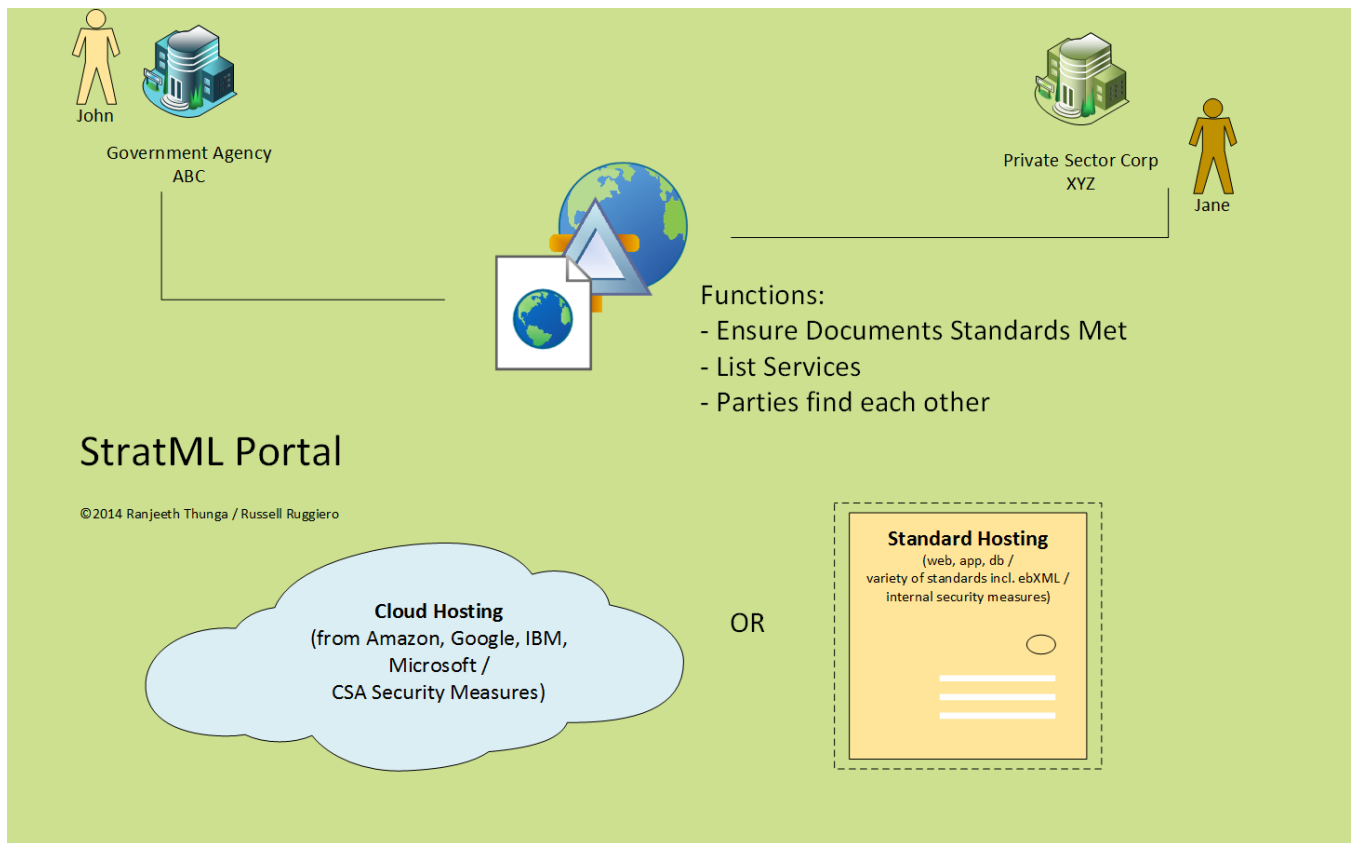
The goal here is to offer a list of services that are enticing and of value to the user. Two main services come to mind 1) StratML Exchange: A place where entities that share the same goals exchange ideas that produce strategic agreements 2) StratML Master Repository: A place where strategic agreements are stored and accessed. In addition, there must be some type of mechanism in place that approves the documents meet certain criteria (e.g., format, security, etc.), so it may be stored in the StratML Master Repository. The services offered must be easy to navigate and somewhat intuitive from a user perspective. For example, it should be easy for one interested party to find another interested party that share common goals and interests. This type of environment can only be created by employing a framework that promotes open-standards, which exposes a view of key factors like name, type of services or products being offered, and contact information of a participating entity. Again, it must be a fruitful environment where interested entities meet, exchange ideas, formulate, and store strategic agreements.

Hosting Options

There are a number of options that could be used regarding the StratML Portal that include traditional in-house hosting (web server, application server, and database/*Microsoft .NET Model Reference) or Cloud-type. Regarding the former, a traditional in-house option while time consuming could support a very wide assortment of open-standards such as Electronic Business eXtensible Markup Language (ebXML) to act as a key component because of its ability to support core data components, messaging, business processes, registries & repositories, and collaboration protocol agreements. Hence, traditional in-house hosting could provide an architecture that promotes open-standards and furthers the theme of an agnostic IT landscape. The Cloud (secure, unsecure, and hybrid) also holds a number of important benefits such as deploying the solution in a much shorter period of time and the ability to scale quickly. Caveat, StratML could deploy its own Cloud, but it could also leverage solutions like Amazon Web Services (AWS), Google Cloud Platform, IBM SmartCloud Enterprise+, and Microsoft Azure Cloud, which all have proven Enterprise track records.

Security

Regarding traditional in-house hosting a defined plan must be in place to deal with issues that include network security, computer security, and information security. Pertaining to Cloud deployments, the Cloud Security Alliance (CSA) is a non-profit that promotes best practices is a good place to start relating to this ever more popular deployment model. From inherent security built into firewalls and operating systems to access control lists and biometrics, this is an area that needs to be given full attention from the outset, and not a half-baked afterthought.



The StratML Exchange

In theory a StratML Exchange would be a place where entities participate in offering their goods & services, along with locating and exchanging ideas with interested parties, which could ultimately lead to consummating strategic agreements. We need to dive a little deeper here to better understand the needs of creating a StratML Exchange. StratML is an XML vocabulary and schema for strategic plans. These include but are not limited to corporate mission statements, policy documents, performance plans, strategic reports, organizational goals, and individual statements of purpose. With that said there are two basic models that could best fit the needs of a StratML Exchange.

One Exchange

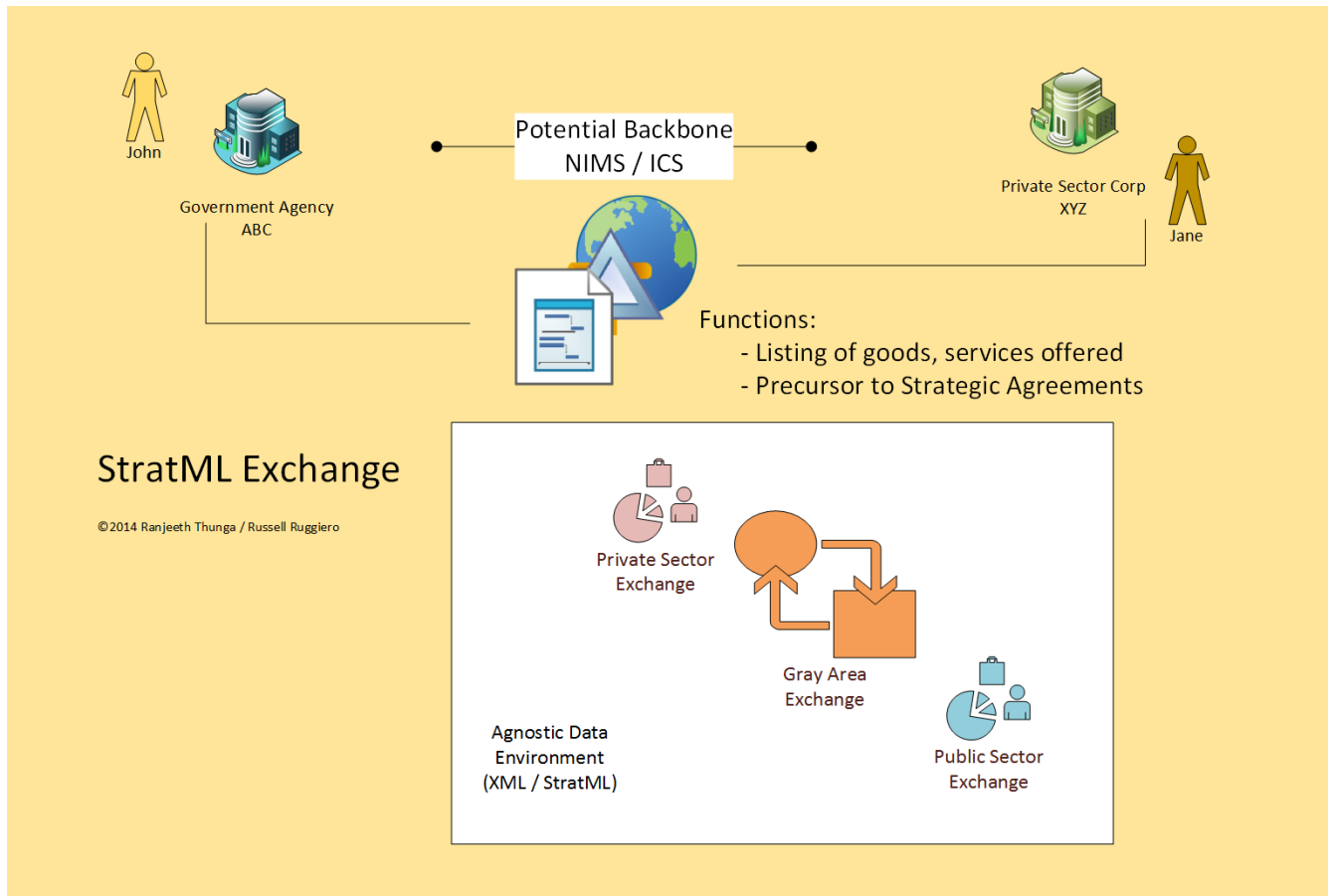
From an implementation perspective this model seems to be the most logical choice. Basically “any” type of entity could become part of and participate in the StratML Exchange.

One Exchange with Private, Public, and Gray Areas

In StratML: Private & Public Sector Uses we outline three areas that entities could form strategic agreements, which include private, public, and gray area (private & public). Below are examples that may be applied to each.

- **Private:** This area of the exchange would only relate to entities that focus on private sector offerings. For example, a small U.S. drug company would like to test its new glaucoma offering in Asia, but has no one on the ground there to do any type of qualified testing. Through the exchange the U.S. drug company finds a reputable party based in Japan who could aid in the process for a fixed fee. As a result a strategic agreement is created that benefits both parties.
- **Public:** Business here operates differently from the private sector, and things like the General Services Administration (GSA) come into play. As a result, this area of the exchange is designed for entities that are approved to operate in the public sector. It must be made clear that certain criteria be met for vendors to operate in the public space and is also where strict guidelines be in place, so that the entities that participate in this area of the exchange are approved to do business at the Federal, state, and local levels. For example, a U.S. manufacturer may want to be part of the exchange to supply the Department of Defense (DOD) with gasmasks in the event of a military action. This is a specific product that is meant for a defined market and the vendor must have the proper paperwork in order to do business with a public sector entity, such as the DOD.
- **Gray Area:** This is an area of the exchange where entities can operate in the private and well as public sectors. Let’s take a moment here to clarify this area of the registry a bit further. For example, a private portable toilet supplier who is authorized to do business with the Federal Government would like to offer its services to the EPA regarding a natural event such as an earthquake or hurricane. This portable toilet supplier also has the ability to offer its services to private sector entities as well. To sum up, a vendor who is approved to do business in the public sector also has the ability forge strategic agreements in the private sector as well.

Regarding the nuts and bolts of creating the StratML Exchange, if it is built with obscure technologies that no one uses, then it will not be used. Bottom line, promoting open-standards like Extensible Markup Language (XML) – centric technologies will help to not only create an agnostic environment, but also make it less cumbersome for participants to be part of the exchange. It is logical to assume that if people are comfortable and knowledgeable in using an open-standard and, or standards then they will be more inclined to be part of something like a StratML Exchange.



The StratML Master Repository

A repository should enable qualified participants to access, view and, or change their agreements in a safe and secure manner. However, before an agreement may be entered into the repository it must meet certain criteria such as acceptable formatting and being free from any type of virus or security threat. As a result, the StratML Master Repository should be divided into two parts that include submit and approval center, along with a repository to store agreements.

Submit and Approval Center

From the outset strategic agreements are consummated between two or more parties, and what is contained in these agreements is between the parties concerned. A repository would be a place where these agreements would be held, and the StratML effort's goal would be for these agreements to be both accessible and secure. Format compliance would deal with former, while various network security, computer security, and information security would deal with the latter. From an agreement perspective things are dynamic in nature and change is inevitable. Thus, participants want this process to be as simple and painless as possible. For example, if the EPA chose to use a different vendor to supply dishwashing liquid in the event of an oil spill, then this modification would have to be made in the agreement to reflect this change. As a result, a change could be made to an existing document, or a new document could be provided. In any event, it is very likely that changes will be made to strategic agreements, and the StratML Master Repository should have a defined mechanism in place to deal with this key requirement.

The Repository

Here is where a number of key factors come into play such as will the repository be “One” or “Segmented” as outlined in the StratML Exchange model. We will expound upon these areas and other possible options in greater detail below.

- **One:** This option creates one repository for any and all agreements. It covers both the private and public sectors and can be viewed as the focal point for any and all agreements.
- **Segmented:** This would be a repository that is comprised of three separate and distinct areas that include Private, Public, and Gray. Private - This area of the repository would only relate to entities that focus on private sector offerings. Public - This area of the repository is designed for entities that are approved to operate in the public sector. Gray - This is an area of the repository where entities can operate in the private and well as public sectors.

If we take a step-back we can see that the mission of StratML is to establish virtual partnerships across plans and organizations. Accordingly, users and service providers could look at the following options that may help promote the use of StratML.

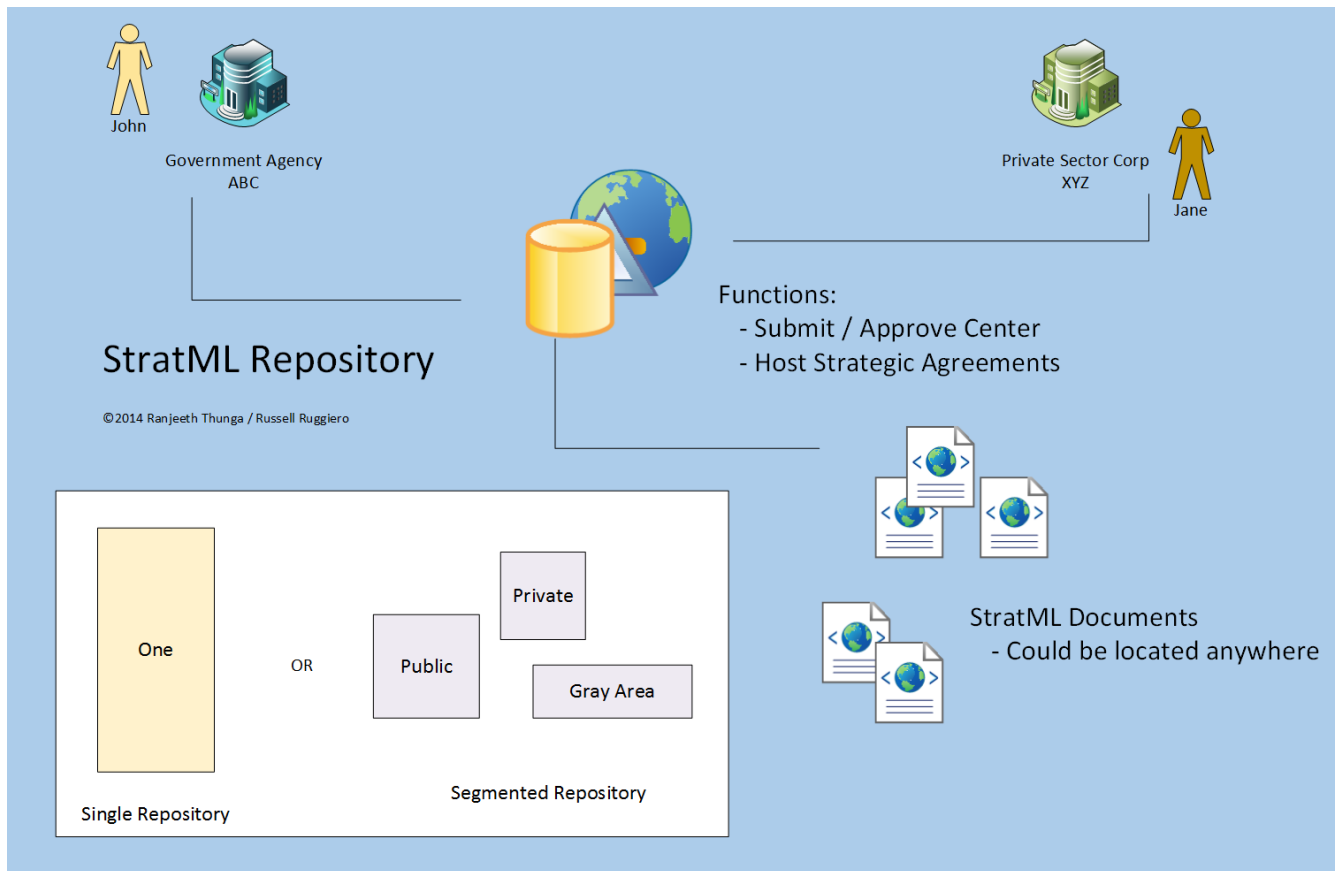
- a. **Users should be free to use whatever StratML services they choose or even none at all, simply by posting their own plans and reports anywhere on the Web in valid StratML format.**
- b. **StratML service providers should be free to innovate, develop and price their capabilities as they see fit.**

With respect to the “Gray Area,” it seems that a service or set of services might enable those who have objectives they don’t yet want to share with the entire world to more selectively and discreetly discover and engage potential performance partners. Conversely, another set of services might enable anyone to identify potential relationships, including performance partnerships, regardless of whether the potential partners themselves are yet ready, willing, or able to engage each other directly.

Below is an important and useful quote from Mr. Owen Ambur, Chairman of the AIIM' StratML standard committee.

“Anyone who cares to do so could use the stratml:Relationship element via such services to crowdsource the creation of virtual performance partnerships ... and use the stratml:PerformanceIndicator (<TargetResult> of the “Input” &/or “Input Processing” type) to “pledge” contributions to realization of the specified objective(s) of the partnership. While such partnerships would best be engaged by mutual reference to the common objective(s) in each other’s plan that would not necessarily be required. Anyone who cares to do so could establish a one-way virtual partnership with anyone else ... by contributing to realization of the objective(s) regardless of whether the second party recognizes those contributions or not.”

Again, it seems quite logical and prudent to have various options when contemplating a deployment of this size and scope.



Technology Paths

Technology will be the enabler and we must take a holistic view in assembling an architecture that will best fit the needs of the StratML Portal, StratML Registry, and StratML Master Repository.

Today's relational database management systems (RDBMS) from companies like IBM, Microsoft, Oracle, and Sybase have become quite roust animals. Case in point: Things like clustering enable multiple computers to act as one at the application level, along with the benefit of high-availability. However, it is important to note that open-source efforts like Apache Hadoop, which enables the distributed processing of large data sets across clusters of commodity-type servers and vendors like Cludera should not be overlooked. Regarding native XML databases, MarkLogic has done some excellent work with its MarkLogic Server, which supports valuable technologies like Extensible Stylesheet Language Transformations (XSLT) 2.0.

Physical also computers play a key role as do the operating systems, which support their own unique security characteristics. For example, a Linux operating system on a HP Proliant server will have a different feature set than an IBM zEnterprise mainframe supporting its z/OS operating system. In the area of virtualization VMware is doing some very interesting things regarding application, desktop, network, server, and storage virtualization. Regarding network security, offerings from Dell Sonic Wall provide broad support for managing large and complex networks and the recent launch of Cisco's software-defined networking technology promises to raise the bar. Concerning security at the user level, products

like the RSA Federated Identity Manager and Symantec 03 are breaking new ground in critical areas like single sign-on (SSO).

Currently, all the pieces exist for the StratML effort to create and host a traditional or Cloud portal, registry, and repository. The StratML effort also has the option of using a well-respected Cloud providers that include Amazon, Google, IBM and, or Microsoft to deploy its portal, registry, and repository solution. As mentioned earlier open-standards like ebXML will play a crucial role as will other key standards like Simple Object Access Protocol (SOAP) and Security Assertion Markup Language (SAML). Bottom line, currently a number of technology paths could be used to support a true Enterprise deployment of StratML.

A Unique Opportunity

The StratML effort is in a position to offer a technology that is truly unique to the private and public sectors. It stands to reason that almost any entity could purchase portal and database software and get these solutions up and running in a matter of months, but a StratML Exchange is a new island in the sea of technology. A place where interested parties with the same common goals and objectives come together with the intent of commutating strategic agreements. It could put critical strategic agreements in place to deal with manmade catastrophic events such as the oil spill outlined in the StratML Toolkit & StratML Cloud report. It is also a serious place where serious business is taken care of. Do we dare say a mature version of current popular social web sites? There is nothing wrong with sharing information (e.g., articles, photos, reports, etc.), which has become more popular today than ever. The StratML Exchange does in fact allow interested parties to swap information to possibly put in place agreements that will better align their mutual goals and objects. Again, it could be public-to-private or private-to-public, that is the beauty of the StratML Exchange concept, is that it plays across all verticals and is pliable enough to help consummate any type of agreement between interested parties. Agreements could be put into place between to private entities regarding a marketing effort, or for more serious matters in the public sector to help save lives, while minimizing injury and property damage. Having this ability is a tremendous asset that something like a StratML Exchange possesses because it does not just cater to a “business” or “personal” sector, but it plays across all sectors.

Postscript

Crafting and assembling a well thought-out framework around StratML will ultimately help to promote wider private and public sector adoption. Accordingly, taking the open-standards route will help get there from a technology interaction and, or coexistence point of view. In relation to the public sector, it will be open, machine-readable solutions like StratML that will help reach the goals of important initiatives like the Government Performance and Results Act (GPRA). Case in point: StratML could enable entities comply with section 10 of the GPRA Modernization Act (GPRAMA), particularly now that Office of Management and Budget (OMB) M-13-13 has reiterated the direction previously set forth in Circular A-119 to use voluntary consensus standards whenever possible.

Regarding public sector uses, National Incident Management System (NIMS) and Incident Command System (ICS) could be a prime candidate for a Strategic Agreement Exchange that leverages StratML's numerous capabilities. Since NIMS promotes a strategic theme and StratML is meant to align, a synergy may exist. In theory a Strategic Exchange using StratML could leverage off the NIMS/ICS backbone. As a result, NIMS gets a new value add via open, machine readable standard. Hence, this could be a "Plug & Play" option to promote strategic agreements between interested parties that share the same goals & interests to better deal with manmade (e.g., terrorist attacks, oil spills, etc.) and natural (e.g., earthquakes, hurricanes, etc.) catastrophic events.

To reiterate, the vision of the StratML standard is a worldwide web of intentions, stakeholders, and results. We have tried to outline a number of possible hosting, exchange, and registry options that be of value regarding the Enterprise deployment of StratML. We have also tried to position StratML as a pliable technology that may be leveraged in the private as well as public sector to create agreements between interested parties that share common goals and objectives. On a final note, it is not all about building a secure, unsecure, or hybrid Cloud because these technologies currently exist, it is really about creating a secure, friendly, and intuitive environment where through the exchange of information, entities may create useful strategic agreements that ultimately help these entities reach their goals and objectives.

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