

CLAIMS

What is claimed is:

1. A system for deploying message-oriented middleware under one or more microservices, comprising:
 - the microservice having one or more of: a business module, a functional module or a combination thereof;
 - a middleware server cluster for one or more of: a business module, a functional module or a combination thereof, wherein the middleware server cluster comprises:
 - one or more creator for creating at least one specific theme formed under a big theme for messaging of each microservice; and
 - one or more consumers subscribed to one or more specific themes;
 - an internal service cluster including one or more internal services for accessing one or more of: the business module, the functional module or the combination thereof;
 - an external service cluster including one or more external components for accessing one or more of: the business module, the functional module or the combination thereof;
 - and
 - a connectivity cluster including one or more connectivity component for connecting the internal services and the external components;
 - wherein the internal services of one or more microservices send a message to the external components through the connectivity component, using the specific theme of the big theme
 - wherein each of the specific theme has at least one channel for communication, wherein the channel for communication is defined in a configuration file, wherein each specific theme and the big theme are defined in the configuration file.
2. The system of claim 1, wherein each of the big theme is at least one business topic.
3. The system of any one of claims 1 or 2, wherein each of the specific theme is a special business function.

4. A method for deploying message-oriented middleware under one or more microservices, comprising:
 - splitting, each microservice into one or more of: a business module, a functional module or a combination thereof;
 - implementing, a functional level middleware cluster, including:
 - creating, three middleware clusters or virtual hosts for at least one of an internal service, a connectivity component and an external component;
 - creating, at least one user on each cluster or virtual host; and
 - sending, a message from the internal services to the connectivity component and the connectivity component redirects the messages to the specific external components.
 - implementing middleware server clusters under business level includes following steps:
 - creating at least one specific theme formed under a big theme for messaging of one or more microservices using one or more creator; and
 - allowing one or more consumers to subscribe in one or more specific themes, wherein each of the specific theme has at least one channel for communication, wherein the channel for communication is defined in a configuration file, wherein each specific theme and the big theme are defined in the configuration file.
5. The method of claim 4, wherein implementing functional level middleware clusters includes sending a message from the external components to the connectivity component and the connectivity component redirecting the message to the internal services.
6. The method of any one of claim 4 or 5, wherein each of the big theme is at least one business topic.
7. The method of any one of claims 4-6, wherein each of the specific theme is a special business function.

8. The method of claim 4, wherein the creator in the business or functional modules creates one specific theme.
9. A computer readable medium storing a program comprising instructions that, when executed by a system, cause the system to perform the method for deploying message-oriented middleware under one or more microservices, comprising:
 - splitting, each microservice into one or more of: a business module, a functional module or a combination thereof;
 - implementing, a functional level middleware cluster, including:
 - creating, three middleware clusters or virtual hosts for at least one of an internal service, a connectivity component and an external component;
 - creating, at least one user on each cluster or virtual host; and
 - sending, a message from the internal services to the connectivity component and the connectivity component redirects the messages to the specific external components;
 - implementing middleware server clusters under business level includes following steps:
 - creating at least one specific theme formed under a big theme for messaging of one or more microservices using one or more creator; and
 - allowing one or more consumers to subscribe in one or more specific themes, wherein each of the specific theme has at least one channel for communication, wherein the channel for communication is defined in a configuration file, wherein each specific theme and the big theme are defined in the configuration file.
10. The computer readable medium of claim 9, wherein implementing functional level middleware clusters includes sending messages from the external components to the connectivity component and the connectivity component redirecting the messages to the internal services.
11. The computer readable medium of any one of claim 9 or 10, wherein each of the big

theme is at least one business topic and each of the specific theme is a special business function.

12. The computer readable medium of claim 9, wherein the creator in the business or functional modules creates one specific theme.