

~~—CLAIMS—~~

~~1. — A method (200,300) for processing a data package (100) to be sent using an application, by an originator of the data package (100) to at least one recipient, the data package (100) having a selected mode of communication, wherein the selected mode of communication provides a given quality of service and a given security level, the method comprising the steps of:~~

~~—analysing (210, 310) the data package (100) to determine content of at least one field of the data package (100);~~

~~—generating (220, 320) a characteristic of the data package (100), wherein the characteristic is based on:~~

~~—at least one of a desired quality of service and a desired security level associated with the data package;~~

~~the selected mode of communication and the given quality of service and / or the given security level provided by the selected mode of communication; and~~

~~the content of the at least one field of the data package (100);~~

~~—determining (230, 340) an incorrect action by the originator of the data package (100) based on the characteristic;~~

~~—notifying the originator of the data package (100), when an incorrect action of the originator of the data package (100) is determined; and~~

~~—transmitting the data package (100) to the at least one recipient via the selected mode of communication, when an incorrect action of the originator of the data package (100) is not determined.~~

~~2. — The method (200) according to claim 1, wherein the selected mode of communication comprises at least one of a method of communication and at least one channel associated with the method of communication.~~

~~3. — The method (200) according to claim 1 or claim 2, further comprising the step of determining a mode of communication, different from the selected mode of communication, from the generated characteristic and transmitting the data package (100) via the determined mode of communication.~~

~~4. The method (300) according to any previous claim, further comprising the step of obtaining (320) a data set (400), the data set (400) comprising at least one expression for generating (330) the characteristic.~~

~~5. The method (300) according to claim 4, wherein the data set (400) is generated by at least one of a system administrator, and a machine learning system (630).~~

~~6. The method (300) according to claim 4 or claim 5, wherein the step of generating (330) the characteristic is further based on the at least one expression and the content of the at least one field of the data package (100).~~

~~7. The method (300) according to any of claims 4 to 6, wherein the at least one expression is a regular expression, the regular expression defining parameters, each parameter being indicative of a correct action by the originator of the data package.~~

~~8. The method (300) according to claim 7, further comprising the step of determining whether the content of the at least one field of the data package (100) corresponds to an alternative parameter in the regular expression, and providing an indication of the alternative parameter to the originator of the data package (100).~~

~~9. The method (200, 300) according to any previous claim, wherein the field of the data package (100) comprises at least one of:~~

- ~~the at least one recipient of the data package;~~
- ~~a payload (120) of the data package (100);~~
- ~~a header (110) of the data package (100);~~
- ~~a footer (130) of the data package (100);~~
- ~~a subject of the data package (100);~~
- ~~metadata associated with the data package (100) and~~
- ~~an attachment associated with the data package (100).~~

~~10. The method (200, 300) according to any previous claim, wherein the content of the at least one field comprises a string of characters, the string of characters representative of at least one of:~~

- ~~a case reference;~~

- ~~-an object identifier;~~
- ~~-a project identifier;~~
- ~~-personally identifiable information; and~~
- ~~-financial information.~~

~~11. The method (200, 300) according to any previous claim, wherein the at least one recipient has a recipient identifier, the recipient identifier comprising at least one of:~~

- ~~-an email address;~~
- ~~-a portion of an email address;~~
- ~~-a domain;~~
- ~~-a user name associated with the selected mode of communication;~~
- ~~-a telephone number; and~~
- ~~-a group identifier, the group identifier representative of a plurality of recipients.~~

~~12. A processor (500) for processing a data package (100) to be sent using an application, by an originator of the data package (100) to at least one recipient, the processor comprising:~~

- ~~-an input module (510) for receiving the data package (100), the data package (100) having a selected mode of communication, wherein the selected mode of communication provides a given quality of service and a given security level;~~
- ~~-an analysis module (520) for analysing the data package (100) to determine content of at least one field of the data package (100);~~
- ~~-a characteristic generation module (530) for generating a characteristic of the data package (100), the characteristic being based on:~~
 - ~~-at least one of a desired quality of service indication and a desired security level indication associated with the data package;~~
 - ~~-the selected mode of communication and the given quality of service and / or the given security level provided by the selected mode of communication; and~~
 - ~~-the content of the at least one field of the data package (100); and~~
- ~~-a determination module (540) for determining incorrect an action of the originator of the data package (100) based on the characteristic;~~
- ~~-a notification module for notifying the originator of the data package (100) when an incorrect action of the originator of the data package (100) is determined; and~~

~~a transmission module for transmitting the data package (100) from the originator of the data package (100) to the at least one recipient via the selected mode of communication when an incorrect action of the originator of the data package (100) is not determined.~~

~~13. The processor (500) according to claim 14, further comprising a communication mode determination module for determining a mode of communication, different from the selected mode of communication, from the generated characteristic and transmitting the data package (100) via the determined mode of communication.~~

~~14. The processor (500) according to claim 14 or claim 15, wherein the input module (510) is arranged to receive a data set (400), the data set (400) comprising at least one expression for generating the characteristic.~~

~~15. A system (600) for processing a data package, the system comprising:
a processor (500) according to any of claims 12 to 14; and
a management device (630), wherein the management device (630) determines at least one criterion for generating the characteristic.~~

~~16. A non-transitory computer-readable storage medium comprising a set of computer-readable instructions stored thereon which, when executed by at least one processor cause the processor to process a data package (100) to be sent using an application, by an originator of the data package (100) to at least one recipient, the data package (100) having a selected mode of communication, wherein the selected mode of communication provides a given quality of service and a given security level, the instructions comprising:~~

~~analysing (210) the data package (100) to determine content of at least one field of the data package (100);~~

~~generating (220) a characteristic of the data package (100), wherein the characteristic is based on:~~

~~at least one of a desired quality of service indication and a desired security level indication associated with the data package;~~

~~the selected mode of communication and the given quality of service and / or the given security level provided by the selected mode of communication; and~~

~~the content of the at least one field of the data package (100); and~~

determining (230) an incorrect action of the originator of the data package (100) based on the characteristic;

notifying the originator of the data package (100), when an incorrect action of the originator of the data package (100) is determined; and

transmitting the data package (100) to the at least one recipient via the selected mode of communication, when an incorrect action of the originator of the data package (100) is not determined.

1. A method for processing a data package to be sent using an application, by an originator of the data package to at least one recipient, the data package having an associated mode of communication, the method comprising the steps of:

analysing the data package to determine content of at least one field of the data package;
obtaining a data set generated by at least one of: a system administrator; and a machine learning system, wherein the data set comprises at least one expression;

generating a characteristic of the data package, wherein the characteristic is based on the mode of communication, the content of the at least one field of the data package, and the data set;

determining an incorrect action by the originator of the data package based on the characteristic;

notifying the originator of the data package, when an incorrect action of the originator of the data package is determined; and

transmitting the data package to the at least one recipient, when an incorrect action of the originator of the data package is not determined.

2. The method according to claim 1, wherein the mode of communication comprises at least one of a method of communication and at least one channel associated with the method of communication.

3. The method according to claim 1, further comprising the step of determining a mode of communication, different from the associated mode of communication, from the generated characteristic and transmitting the data package via the determined mode of communication.

4. The method according to claim 1, wherein the step of generating the characteristic is further based on the at least one expression and the content of the at least one field of the data package.

5. The method according to claim 1, wherein the at least one expression is a regular expression, the regular expression defining parameters, each parameter being indicative of a correct action by the originator of the data package.

6. The method according to claim 5, further comprising the step of determining whether the content of the at least one field of the data package corresponds to an alternative parameter in the regular expression, and providing an indication of the alternative parameter to the originator of the data package.

7. The method according to claim 1, wherein the field of the data package comprises at least one of:

the at least one recipient of the data package;
a payload of the data package;
a header of the data package;
a footer of the data package;
a subject of the data package;
metadata associated with the data package; and
an attachment associated with the data package.

8. The method according to claim 1, wherein the content of the at least one field comprises a string of characters, the string of characters representative of at least one of:

a case reference;
an object identifier;
a project identifier;
personally identifiable information; and
financial information.

9. The method according to claim 1, wherein the at least one recipient has a recipient identifier, the recipient identifier comprising at least one of:

an email address;

a portion of an email address;

a domain;

a user name associated with the mode of communication;

a telephone number; and

a group identifier, the group identifier representative of a plurality of recipients.

10. A processor for processing a data package to be sent using an application, by an originator of the data package to at least one recipient, the processor comprising:

an input module for receiving the data package, the data package having an associated mode of communication, and a data set comprising at least one expression, the data set generated by at least one of: a system administrator; and a machine learning system;

an analysis module for analysing the data package to determine content of at least one field of the data package;

a characteristic generation module for generating a characteristic of the data package, the characteristic being based on the mode of communication, the content of the at least one field of the data package and the data set;

a determination module for determining incorrect an action of the originator of the data package based on the characteristic;

a notification module for notifying the originator of the data package when an incorrect action of the originator of the data package is determined; and

a transmission module for transmitting the data package from the originator of the data package to the at least one recipient when an incorrect action of the originator of the data package is not determined.

11. The processor according to claim 10, further comprising a communication mode determination module for determining a mode of communication, different from the associated mode of communication, from the generated characteristic and transmitting the data package via the determined mode of communication.

12. A non-transitory computer-readable storage medium comprising a set of computer-readable instructions stored thereon which, when executed by at least one processor cause the processor to process a data package to be sent using an application, by an originator of the data package to at least one recipient, the data package having an associated mode of communication, the instructions comprising:

analysing the data package to determine content of at least one field of the data package;

obtaining a data set generated by at least one of: a system administrator; and a machine learning system, wherein the data set comprises at least one expression;

generating a characteristic of the data package, wherein the characteristic is based on the mode of communication, the content of the at least one field of the data package, and the data set;

determining an incorrect action of the originator of the data package based on the characteristic;

notifying the originator of the data package, when an incorrect action of the originator of the data package is determined, and

transmitting the data package to the at least one recipient, when an incorrect action of the originator of the data package is not determined.