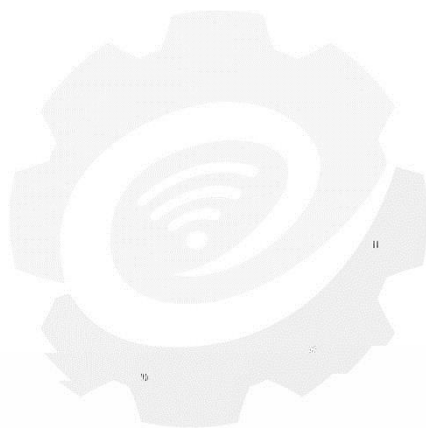


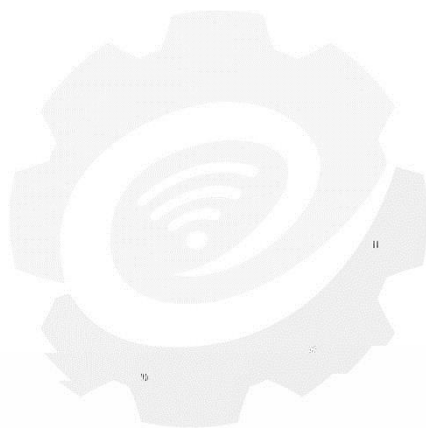
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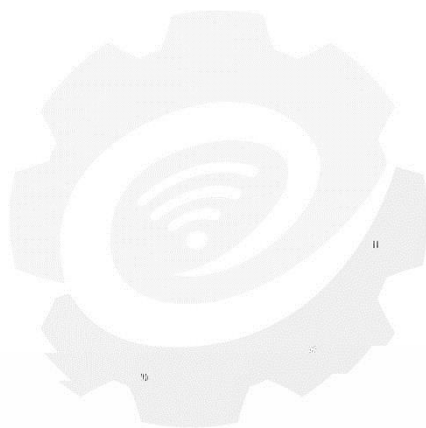
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Alliance of Industrial Internet A

AII

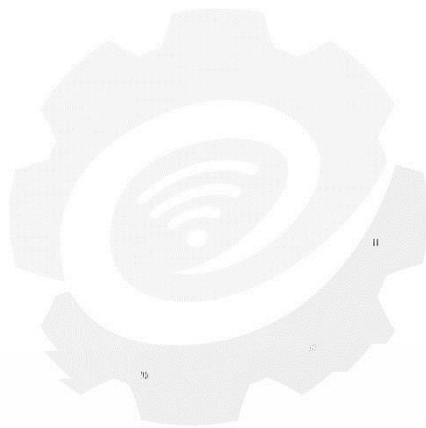
2017 7



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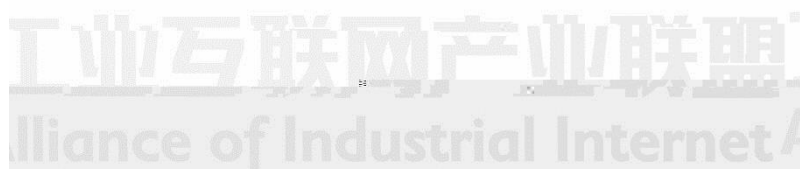


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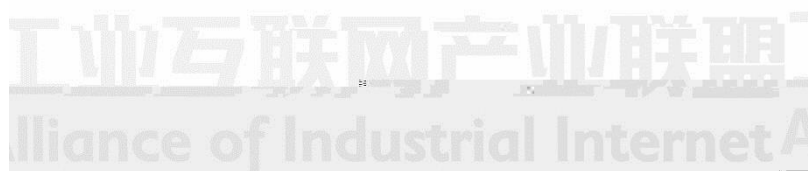


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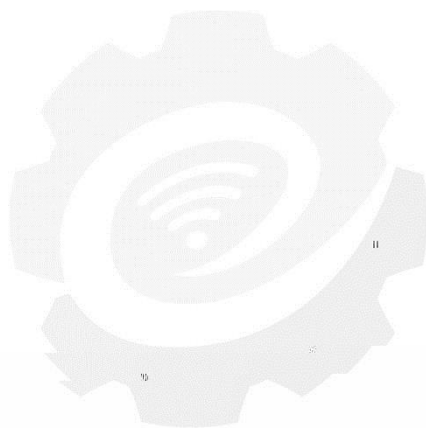


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2-2-10

Ecode

.....



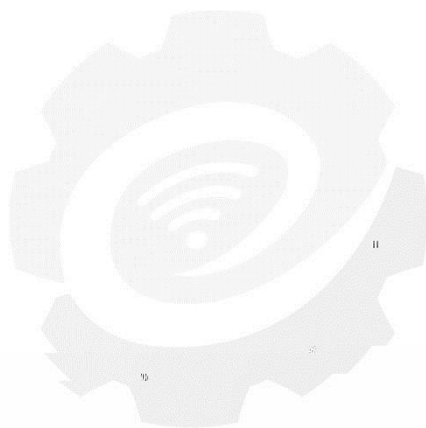
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1

工业互联网体系顶层体系目标框架



1



工业互联网产业联盟
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OPC/OPCUA

-

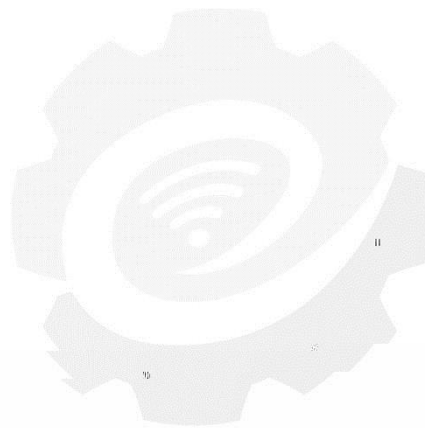
Handle

ONS

ONS Handle

OID Ecode

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工业互联网产业联盟
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1.

1.1

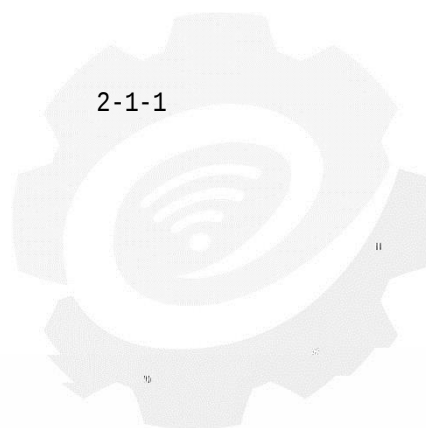
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1997

2010

600

1.2

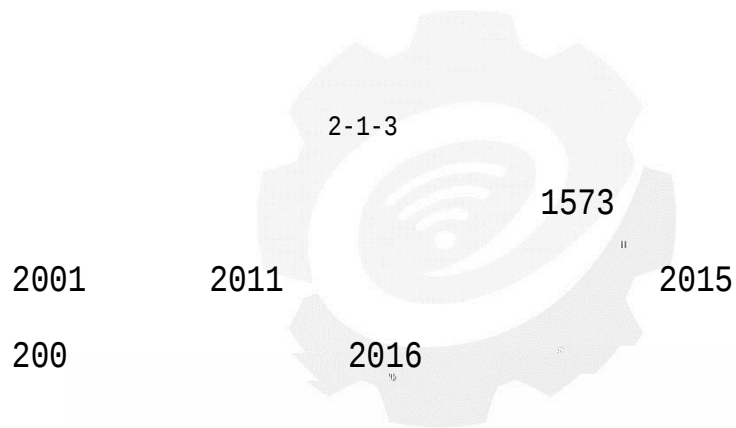
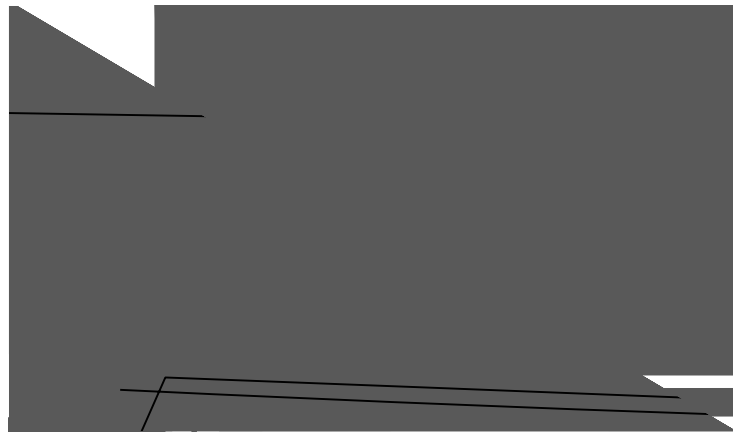


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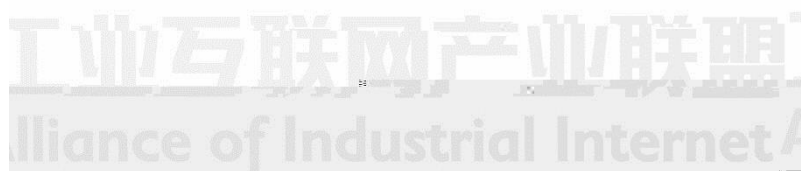
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PROFINET

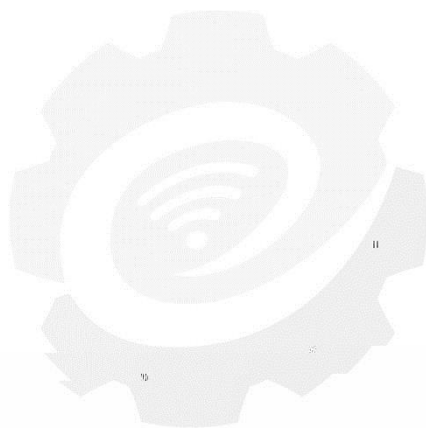


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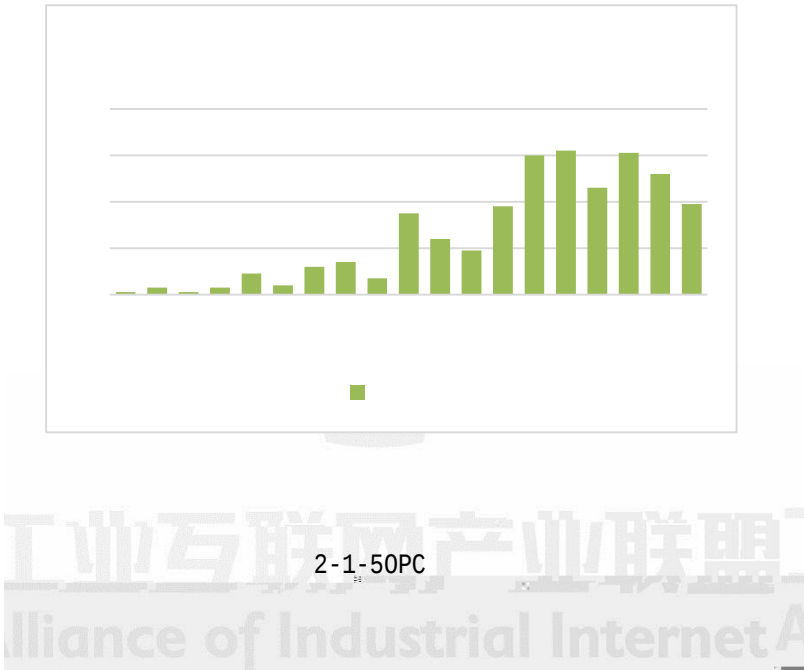
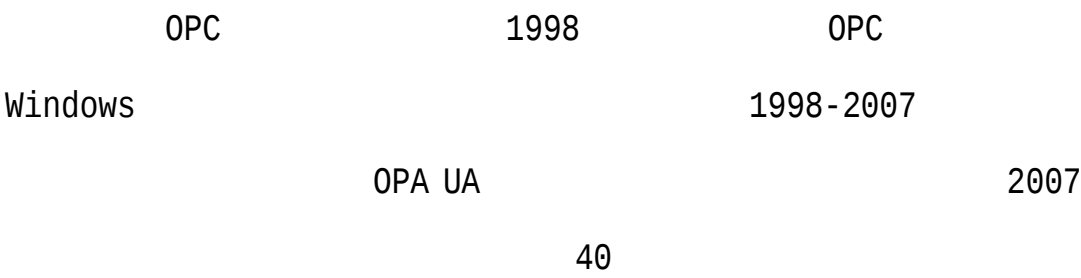
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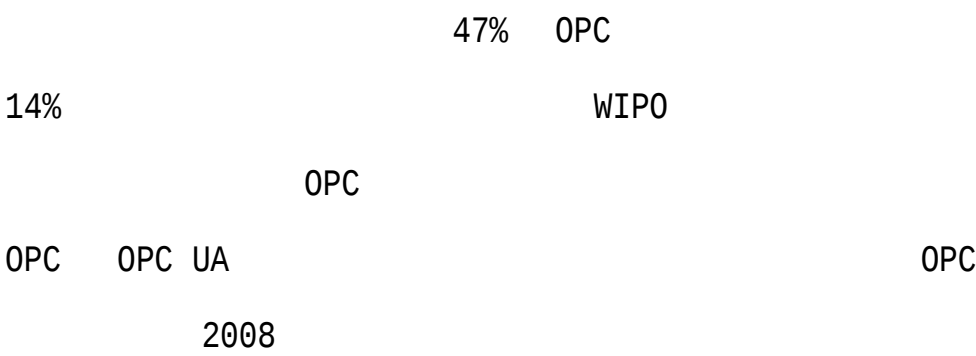
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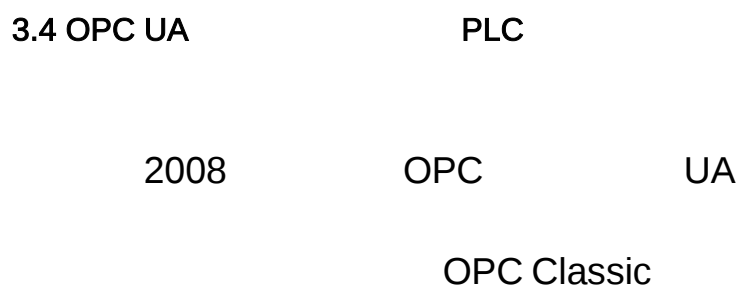
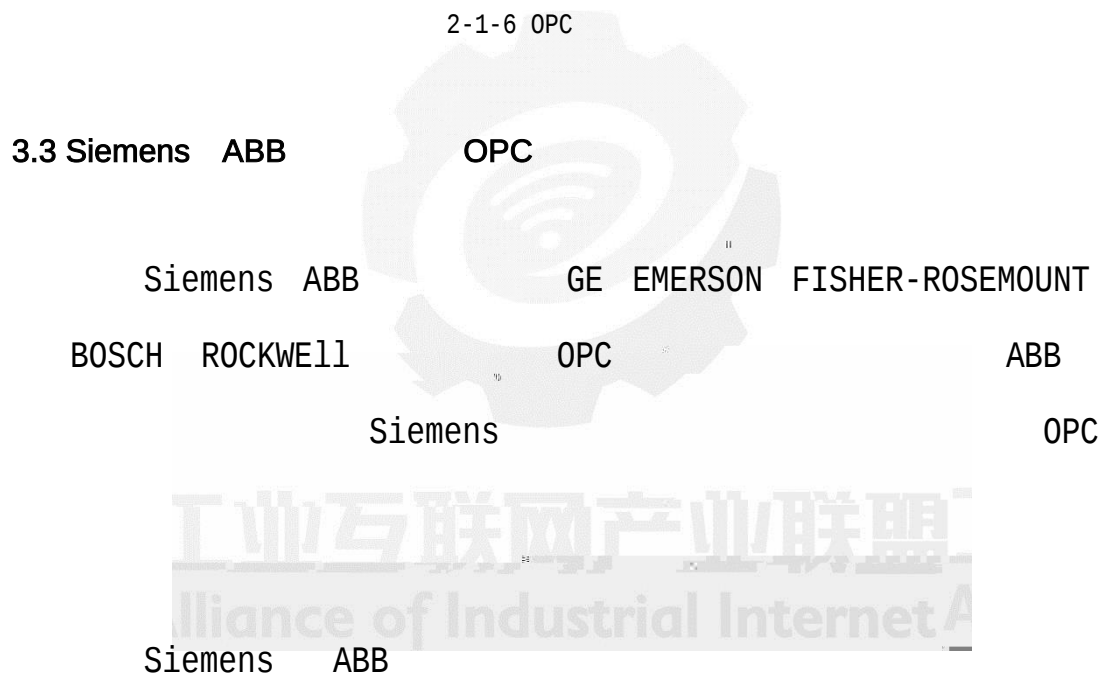
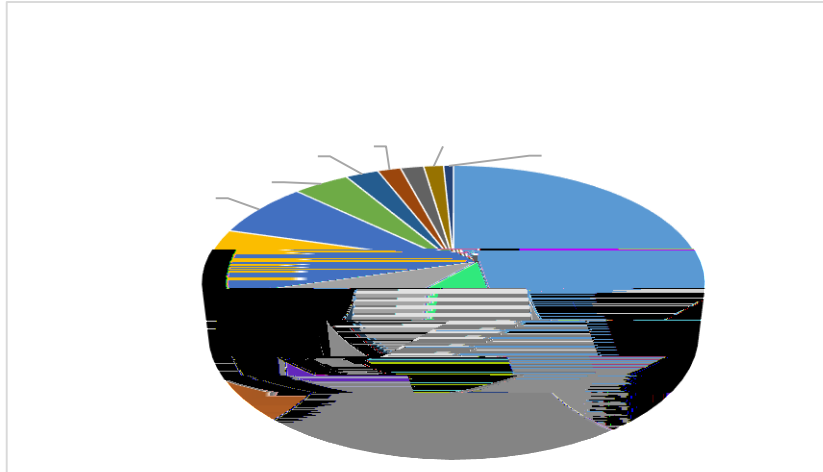
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3.1 OPC/OPC UA 2012



3.2 OPC

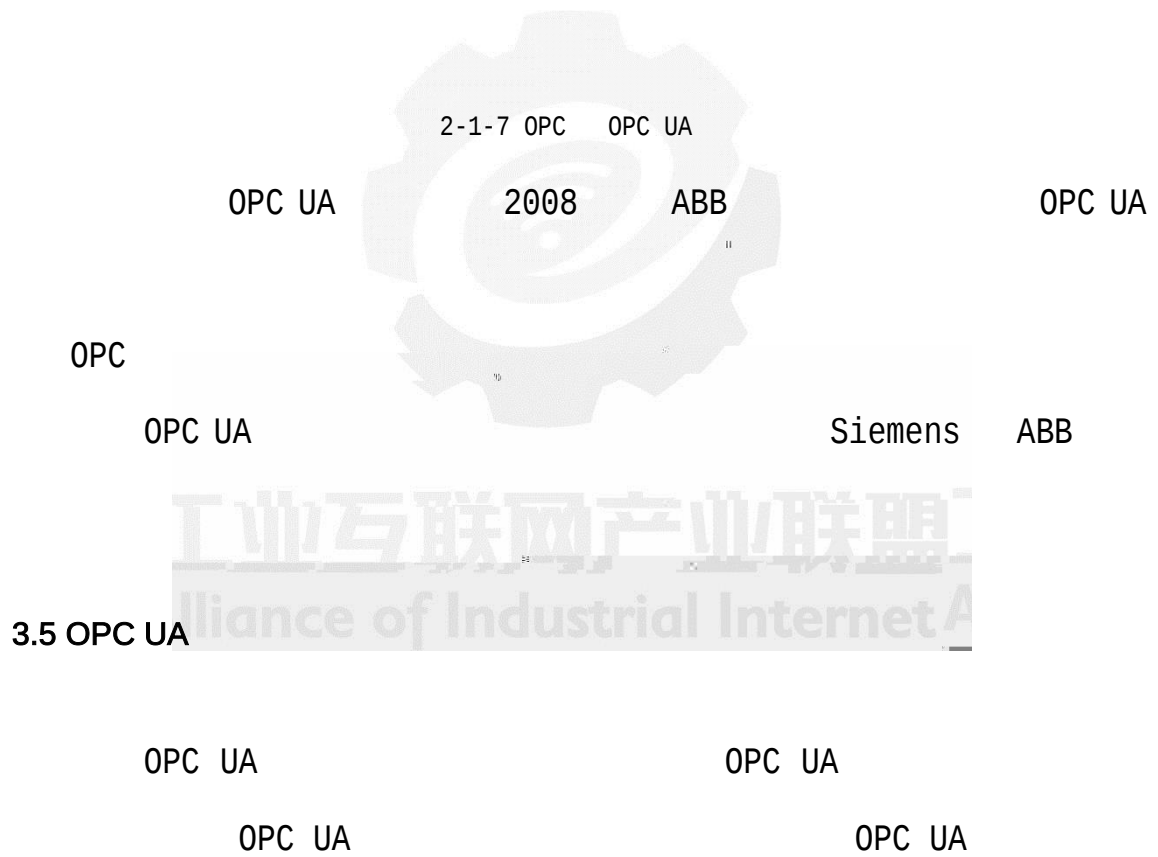




OPC

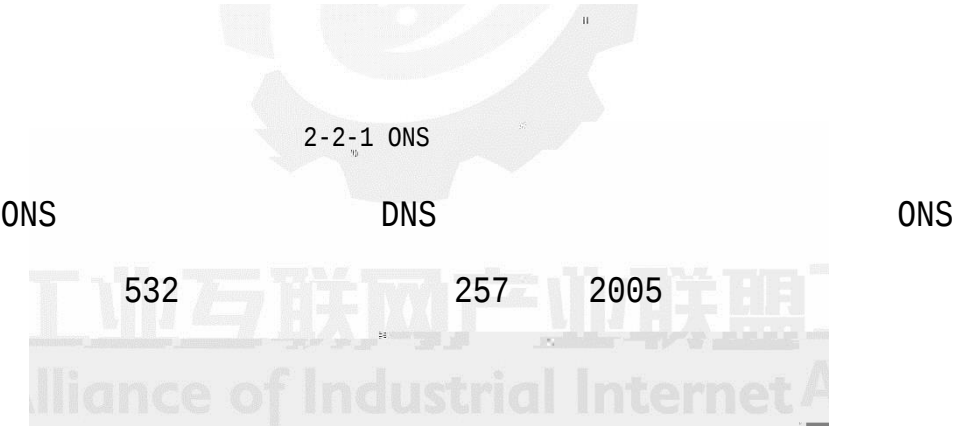
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OPC UA



1.0NS

1.1 ONS



2-2-2 ONS

ONS

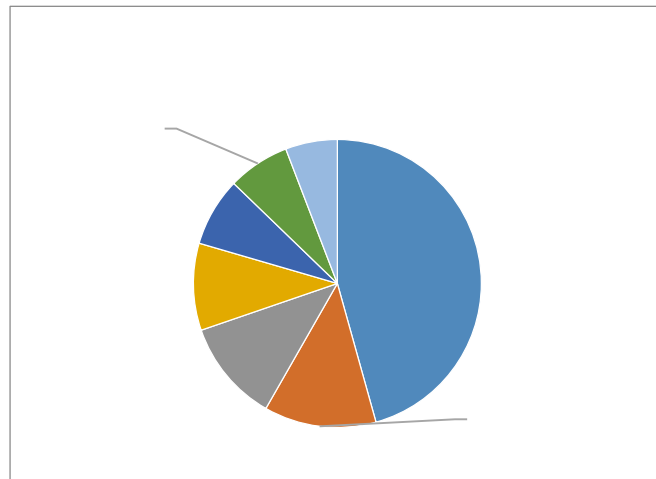
2012

2013

1.2

ONS

ONS



2-2-3 ONS

AT&T IBM

GE
(IIC)

1.3 ONS

Cisco

ONS

80

IBM

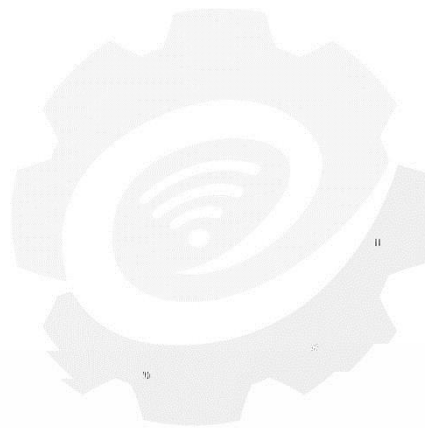
ONS

70

ONS

1.4 ONS

ONS



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2.2 Handle

Handle

Handle



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CONTENT DIRECTIONS

AMERICAN EXPRESS TRAVEL RELATE

2.4 Handle

Handle

3.OID

3.1 OID

Object identifier, OID

ISO/IEC ITU

OID

2016 5 , OID

954393

OID

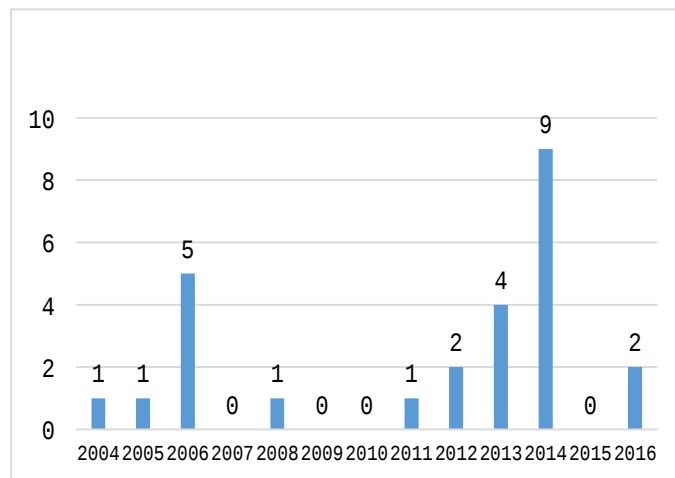
RFID 3GPP

OID

130

56

2-2-6 OID



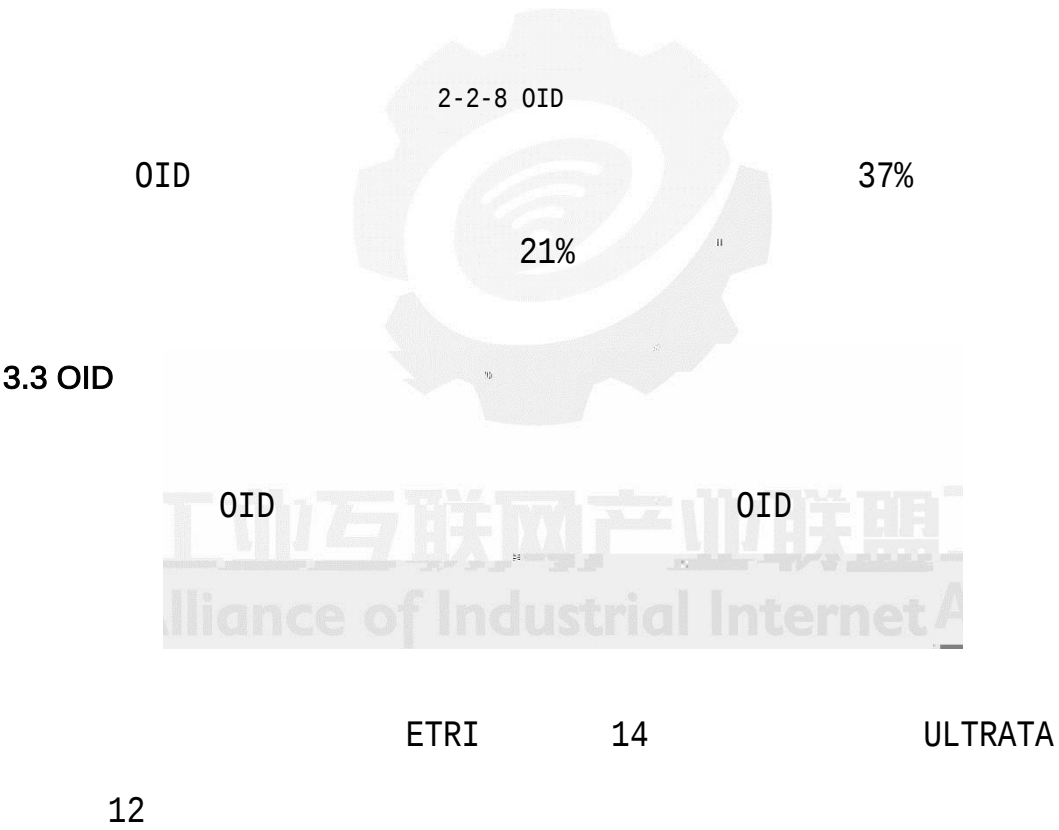
3.2 OID

OID

(JOINT-ISO-ITU-T) ITU-T ISO ISO-ITU

ISO ISO-ITU

OID



3.4 OID

RFID

OID

RFID

OID

4.Ecode

4.1 Ecode

2013

Ecode

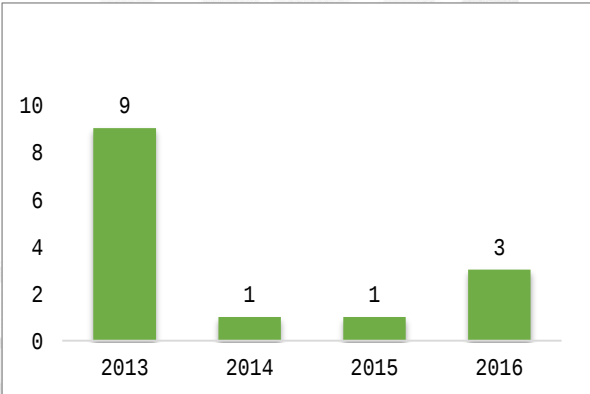
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22

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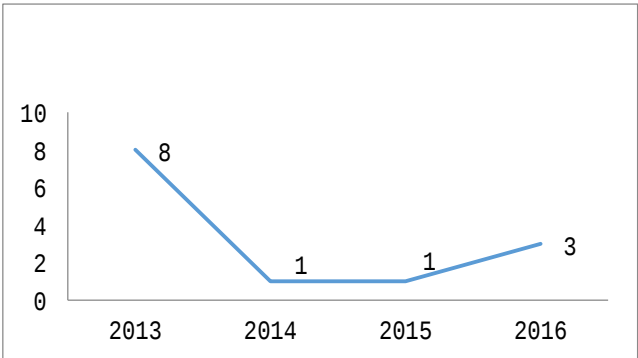
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2013



2-2-9

Ecode



2-2-10 Ecode

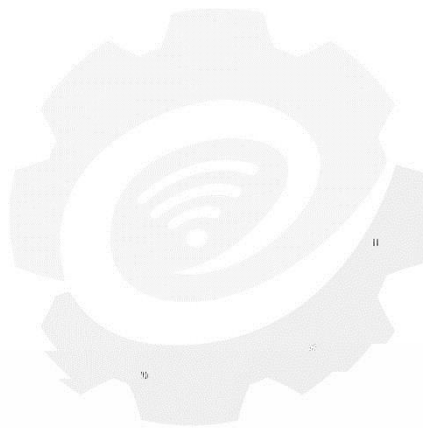
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4.2. Ecode 4. 4.

Ecode

Ecode



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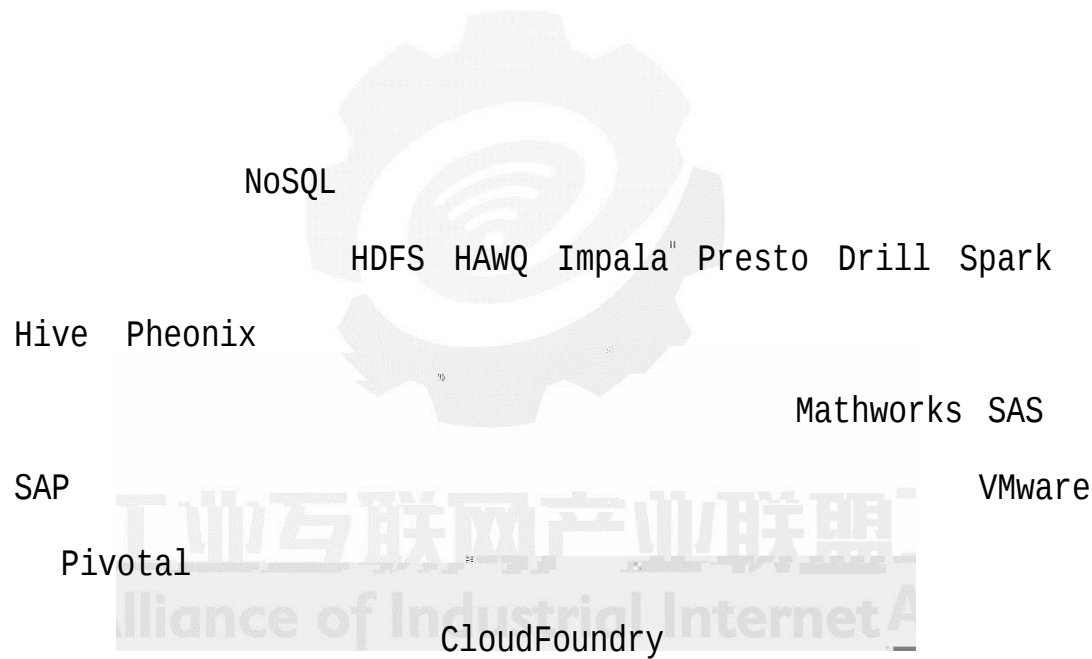
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Ecode

2 Ecode

4.4 Ecode

Ecode



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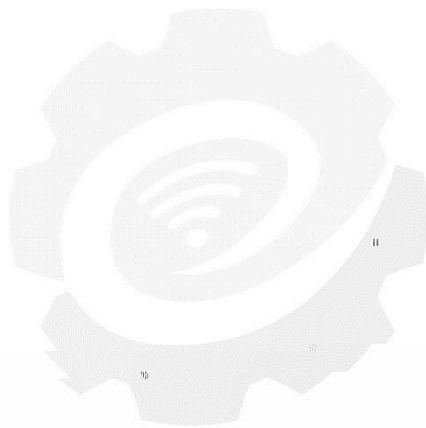
1.1 NoSQL

NoSQL

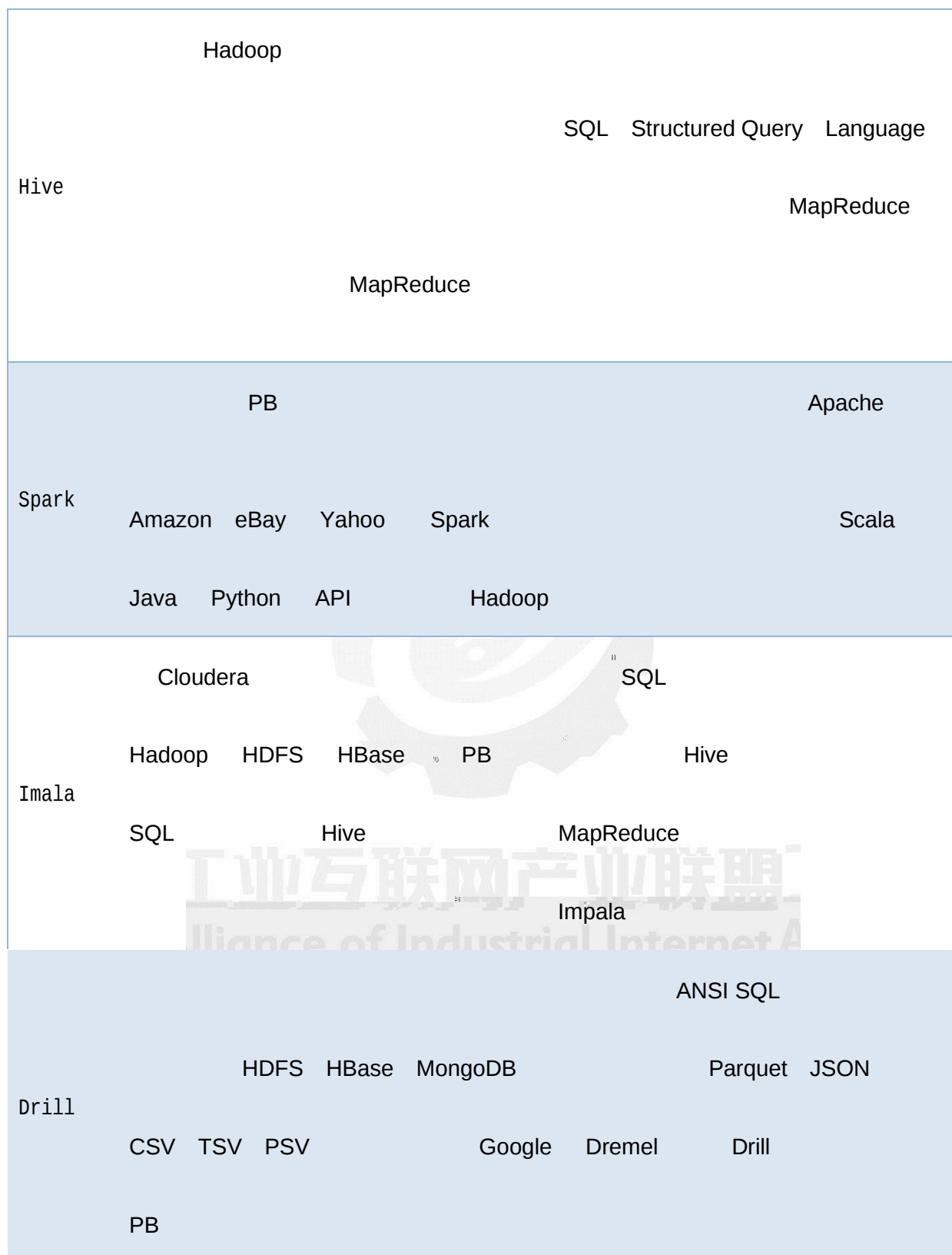
NoSQL

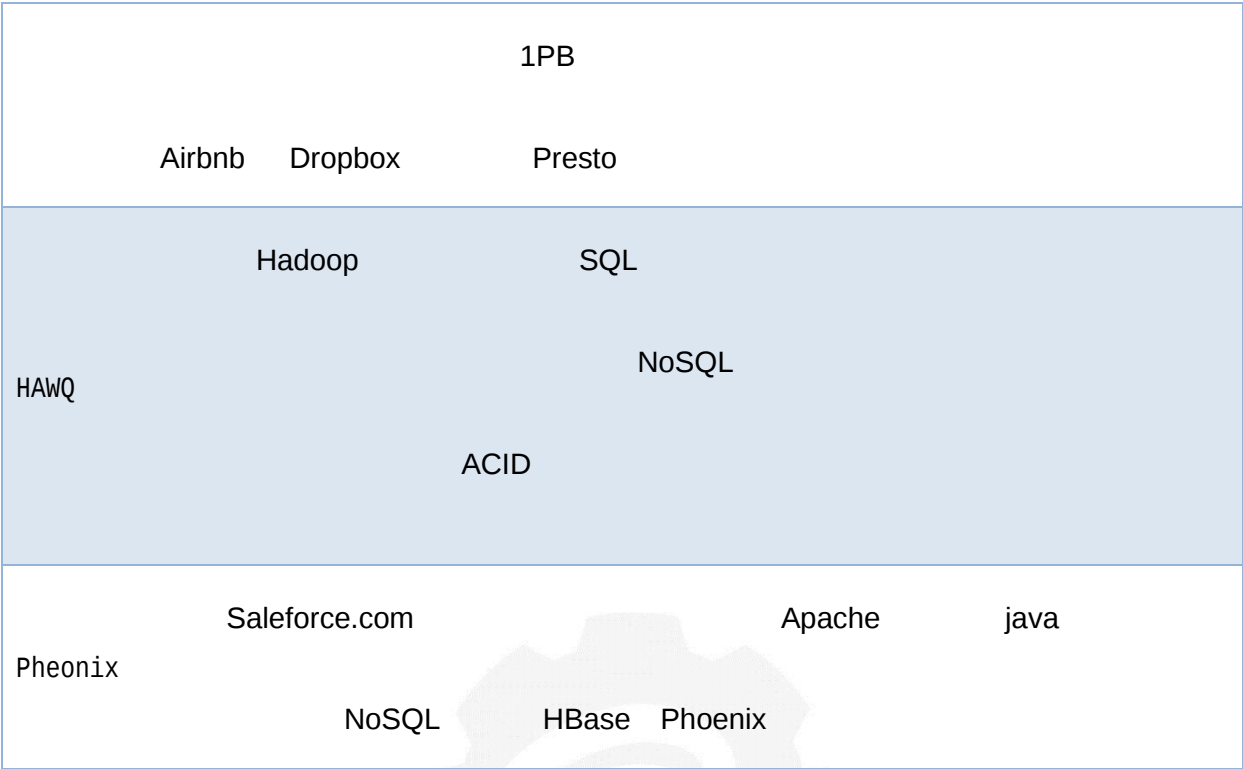
IBM





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2.2

2.2.1 HDFS Hive Spark



4000

2629

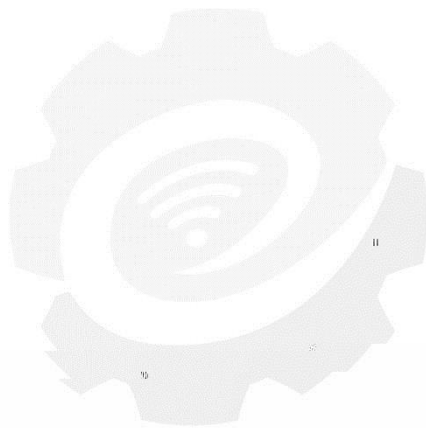
HDFS Hive Spark

Imala

Drill

Presto HAWQ Pheonix

HDFS Hive Spark



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Spark

2009

2016

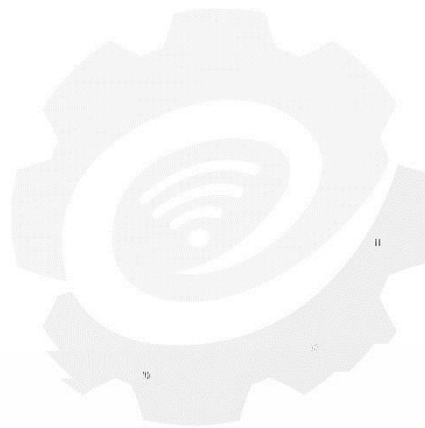
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579

Spark

Hive

MapReduce



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HAWQ

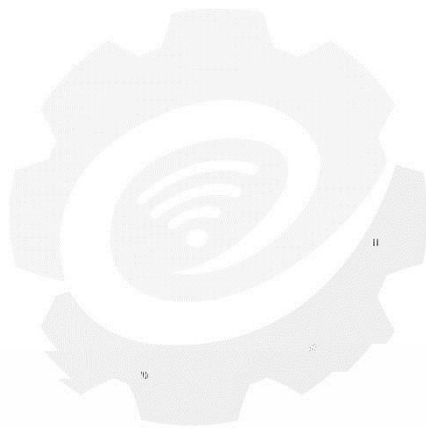
2.2.2

24%



2-3-6

2.2.3 IBM FACEBOOKD 57BDC BT1 0 0 1 399.7 2850 1 4240BDC B/F16 14.04



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Hive

Hive



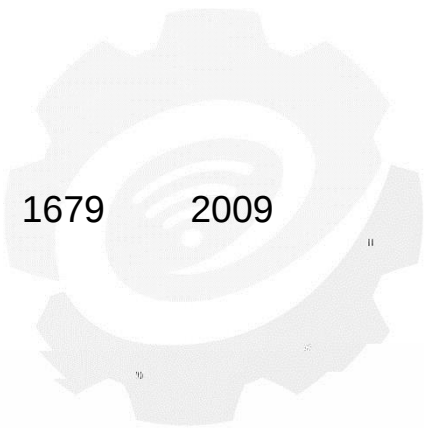
Pheonix

Pheonix

3.

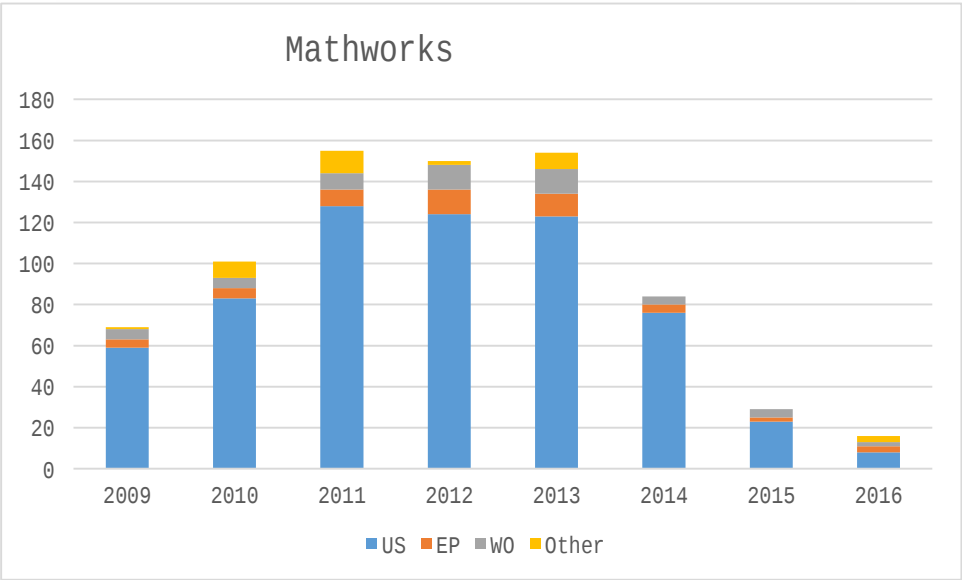
3.1 Mathworks

Mathworks



2011

2013



2-3-7 Mathworks

Mathworks

Mathworks

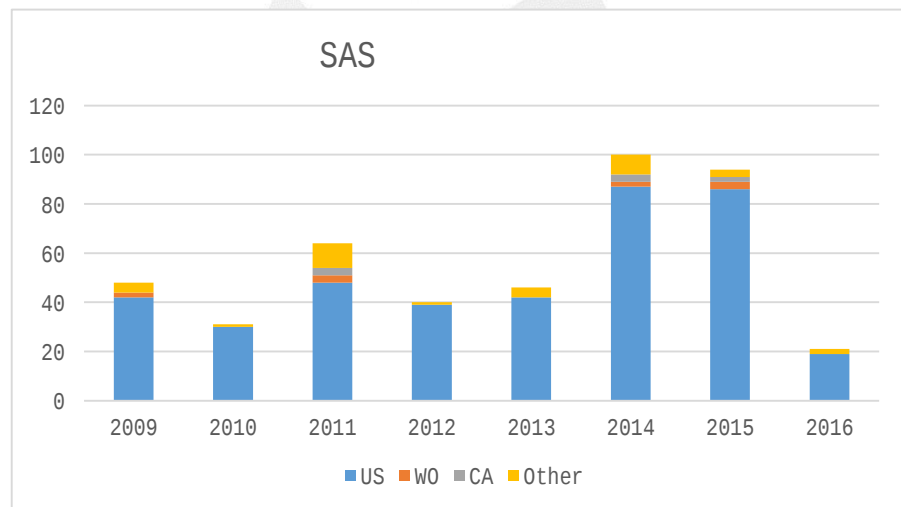
3.2 SAS

SAS

1976 SAS

SAS INSTITUTE INC

SAS



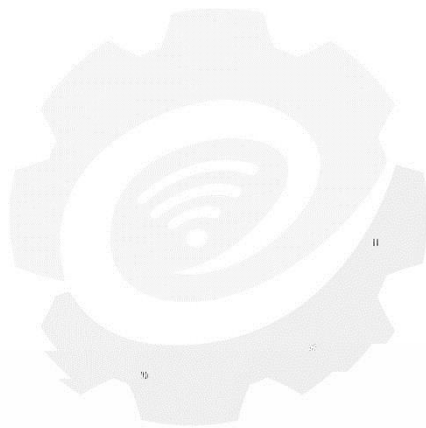
2-3-8 SAS

SAP

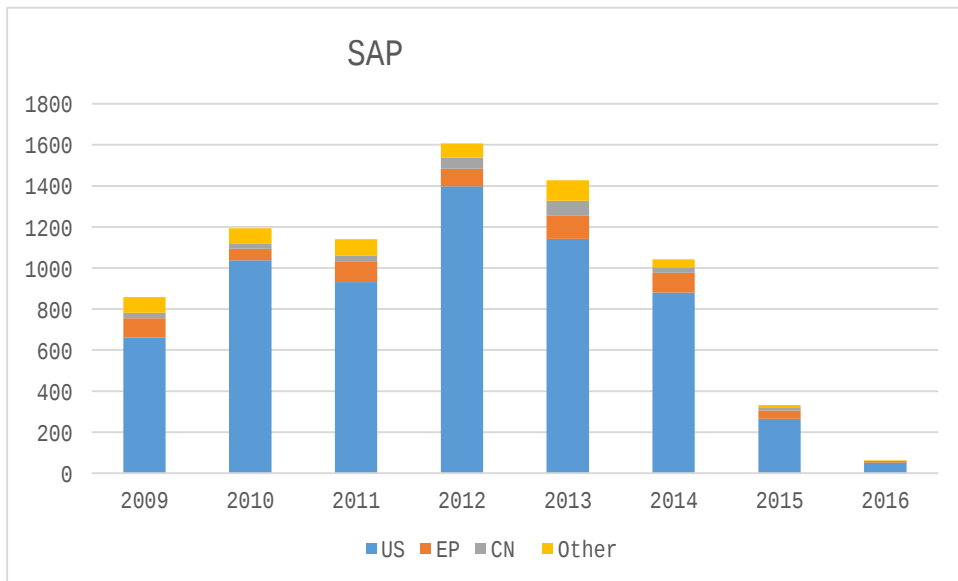
SAS INSTITUTE INC

694

2009



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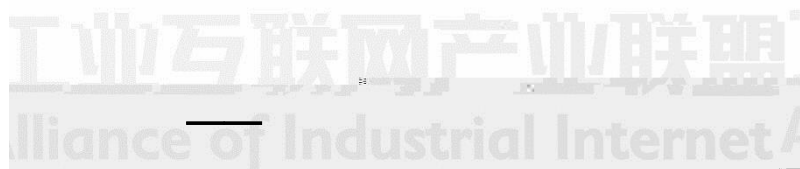


SAP

2-3-9 SAP

SAP

4.



4.1 Pivotal software

Cloud Foundry

GreenPlum

Pivotal software

Pivotal

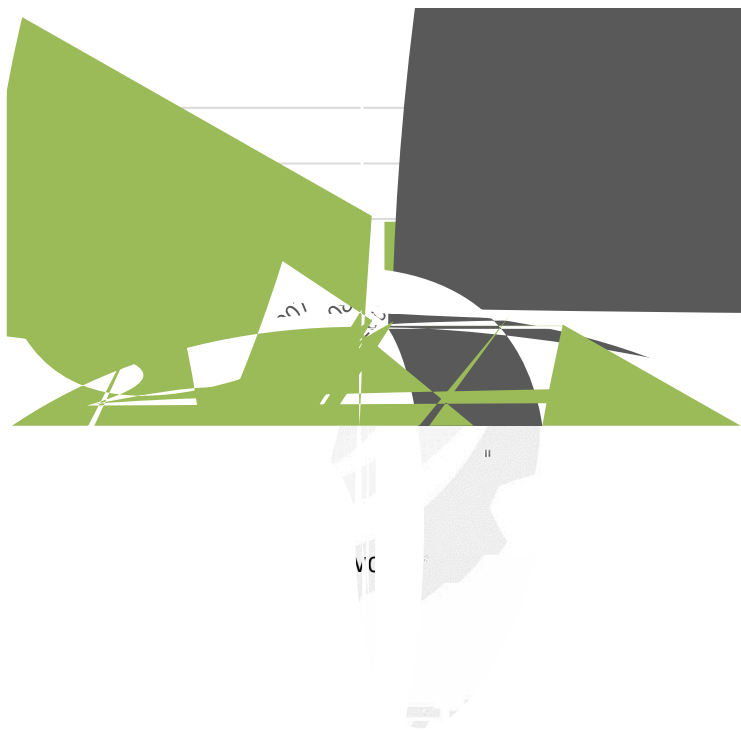
Pivotal One

Pivotal

Pivotal

4.1.1 Pivotal

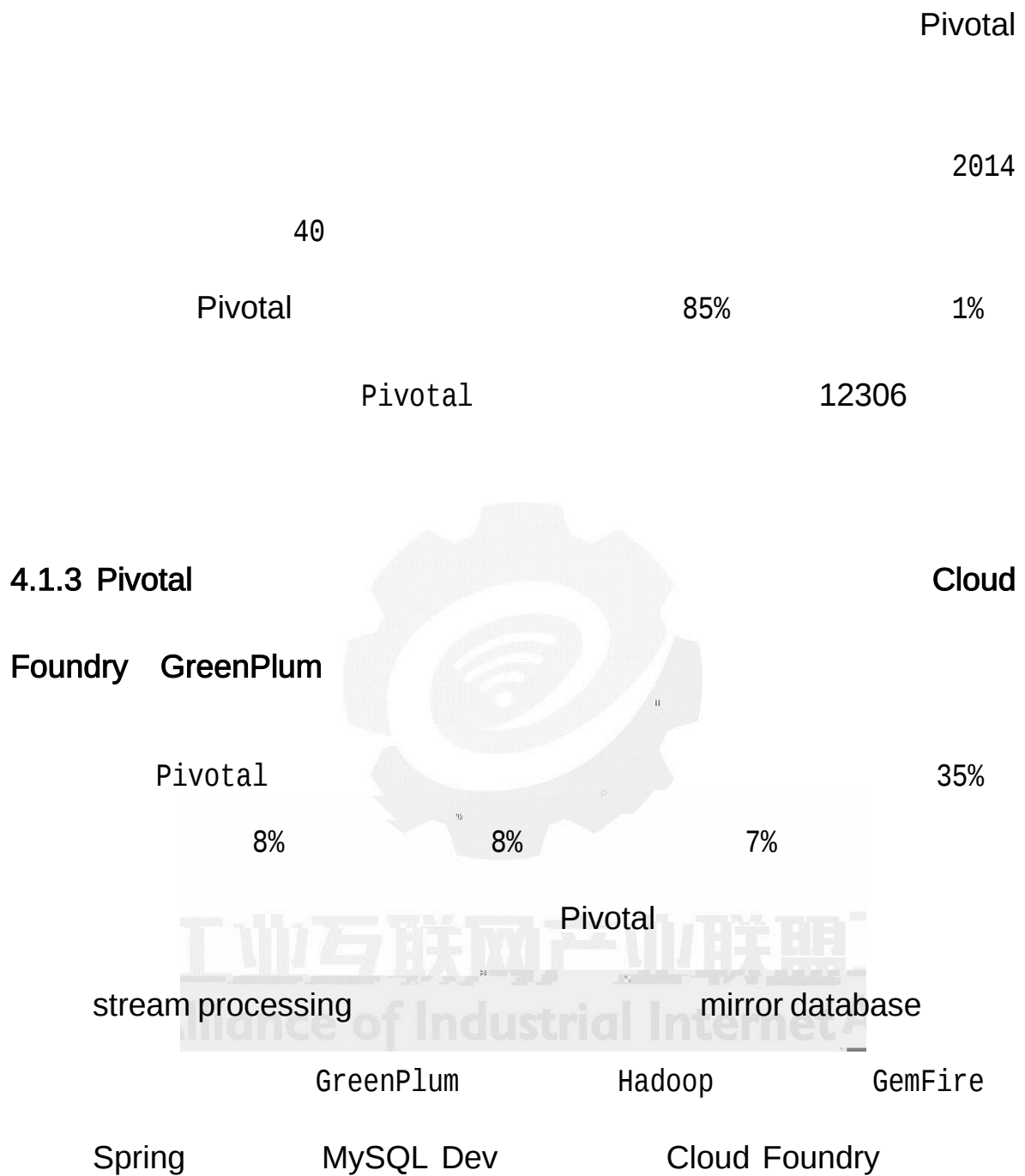
VMware EMC

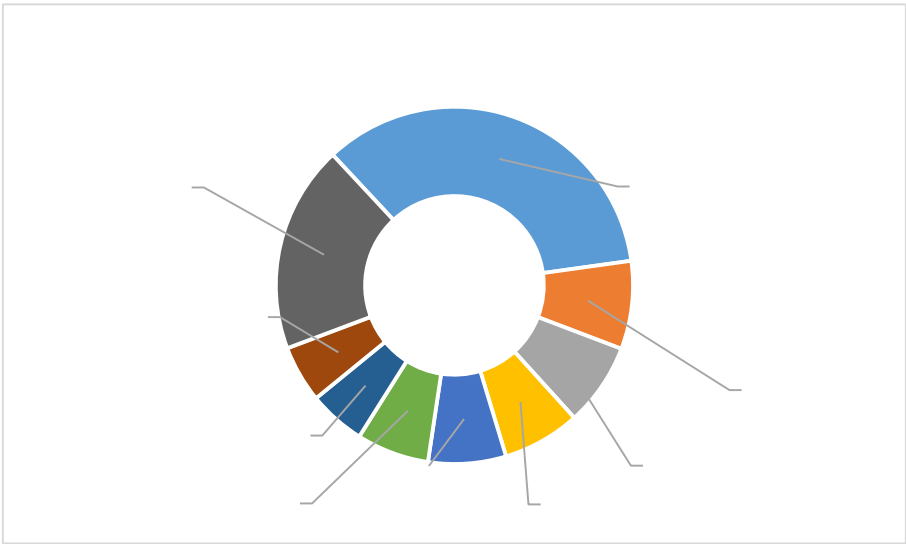


l P.

18.

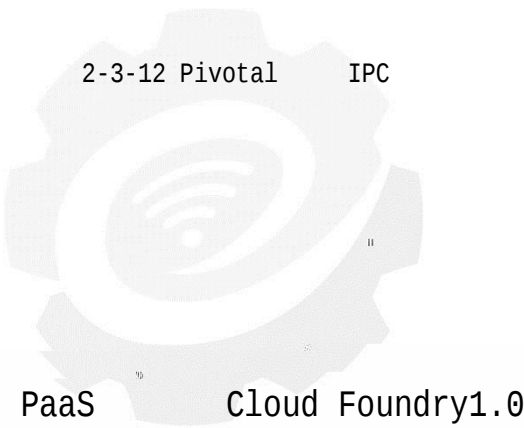
ware





4.2 VMware

VMware



4.2.1 VMware

VMware



1032

2001

VMware

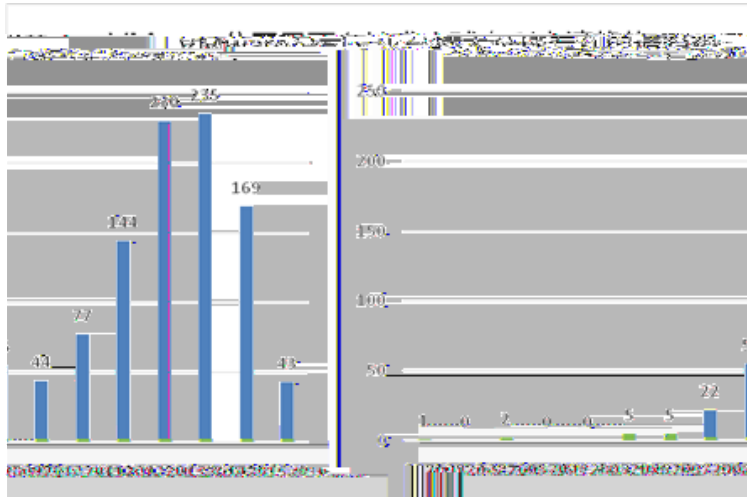
2008

VMware

2014

235

VMware



2-3-13 VMware

4.2.2 VMware

VMware

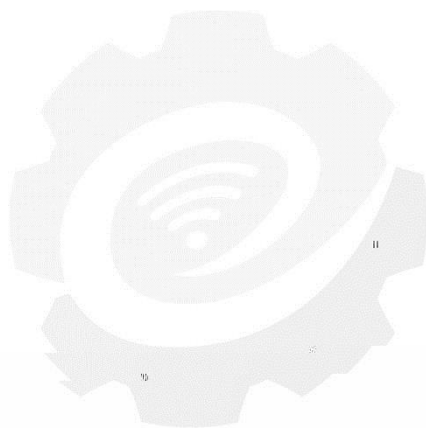
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VMware

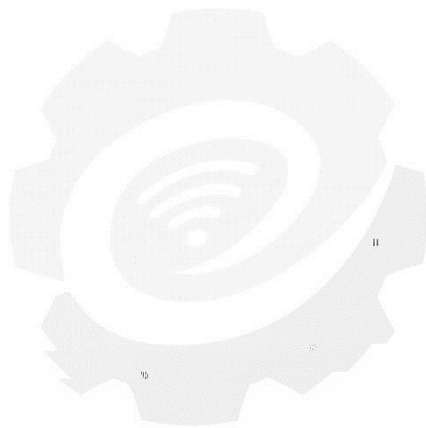


2-3-14 VMware

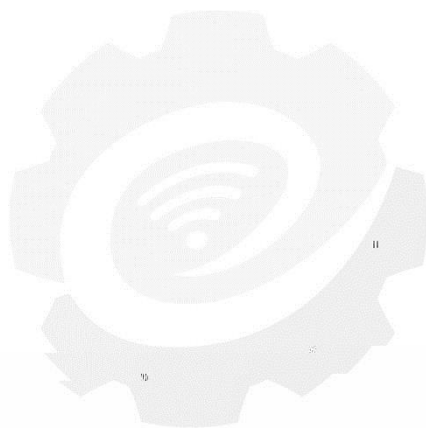
VMware



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