



UNIVERSITÀ
DEGLI STUDI
DI TERAMO

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Cloud e strumenti collaborativi

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**Cloud Computing:
Esempi di cloud computing
Seconda parte**

II. Cloud: Alcuni esempi

Amazon Web Services (AWS)






- ▶ Senz'altro l' Infrastructure-as-a-Service più utilizzato e conosciuto
- ▶ Fornisce una **moltitudine di servizi Cloud**:
 - ▶ **Elastic Compute Cloud (EC2)**
 - ▶ **Simple Storage System (S3)**
 - ▶ **CloudFront**
 - ▶ **Route 53**
 - ▶ **Glacier,...**
- ▶ Fornisce API di accesso ai Web Services ed Interfaccia Web di gestione
 - ▶ Oltre che tool dedicato per AuthN/AuthZ alle risorse AWS (IAM)
- ▶ Permette accesso con credenziali di tipo
 - ▶ Access Key, X.509, Key Pairs

<http://www.amazon.com/aws>







Amazon Web Services




Compute & Networking

-  **Direct Connect**
Dedicated Network Connection to AWS
-  **EC2**
Virtual Servers in the Cloud
-  **Elastic MapReduce**
Managed Hadoop Framework
-  **Route 53**
Scalable Domain Name System
-  **VPC**
Isolated Cloud Resources





Storage & Content Delivery

-  **CloudFront**
Global Content Delivery Network
-  **Glacier**
Archive Storage in the Cloud
-  **S3**
Scalable Storage in the Cloud
-  **Storage Gateway**
Integrates on-premises IT environments with Cloud storage






Database

-  **DynamoDB**
Predictable and Scalable NoSQL Data Store
-  **ElastiCache**
In-Memory Cache
-  **RDS**
Managed Relational Database Service

Deployment & Management

-  **CloudFormation**
Templated AWS Resource Creation
-  **CloudWatch**
Resource & Application Monitoring
-  **Elastic Beanstalk**
AWS Application Container
-  **IAM**
Secure AWS Access Control

App Services

-  **CloudSearch**
Managed Search Service
-  **SES**
Email Sending Service
-  **SNS**
Push Notification Service
-  **SQS**
Message Queue Service
-  **SWF**
Workflow Service for Coordinating Application Components



Sign Up

My Account / Console

English

AWS Products & Solutions

AWS Product Information



Developers

Support

Account

- Account Activity
- AWS Identity and Access Management
- AWS Management Console
- Consolidated Billing
- DevPay
- Manage Your Account**
- Payment Method
- Personal Information
- Security Credentials
- Usage Reports
- Billing Alerts
- Billing Preferences

Welcome Mario Reale | Sign Out

Account Number 1267-1723-0085

Manage Your Account

Services You're Signed Up For	
Amazon CloudFormation	Amazon Simple Queue Service (SQS)
Amazon CloudFront	Amazon Simple Storage Service (S3)
Amazon CloudSearch	Amazon Simple Workflow Service (SWF)
Amazon CloudWatch	Amazon SimpleDB
Amazon DynamoDB	Amazon Virtual Private Cloud (VPC)
Amazon Elastic Compute Cloud (EC2)	Auto Scaling
Amazon Elastic MapReduce	AWS Direct Connect
Amazon ElastiCache	AWS Elastic Beanstalk
Amazon Glacier	AWS Import/Export
Amazon Mechanical Turk	AWS Storage Gateway
Amazon Relational Database Service (RDS)	Elastic Block Store (EBS)
Amazon Route 53	Elastic Load Balancing
Amazon Simple Email Service (SES)	Product Advertising API
Amazon Simple Notification Service (SNS)	

Funzionalità fornite da Amazon EC2

Amazon EC2 presenta un vero e proprio ambiente di elaborazione virtuale, che consente di:

- utilizzare le interfacce di servizi web per lanciare le istanze con una varietà di sistemi operativi
- caricarle con l'ambiente applicativo desiderato
- gestire i permessi di accesso della rete
- eseguire l'immagine desiderata
 - istanziandola in molteplici entità o un'unica

Costo di Amazon EC2

Region: <input type="text" value="US East (N. Virginia)"/>		
	Linux/UNIX Usage	Windows Usage
Standard On-Demand Instances		
Small (Default)	\$0.080 per Hour	\$0.115 per Hour
Medium	\$0.160 per Hour	\$0.230 per Hour
Large	\$0.320 per Hour	\$0.460 per Hour
Extra Large	\$0.640 per Hour	\$0.920 per Hour
Micro On-Demand Instances		
Micro	\$0.020 per Hour	\$0.020 per Hour
High-Memory On-Demand Instances		
Extra Large	\$0.450 per Hour	\$0.570 per Hour
Double Extra Large	\$0.900 per Hour	\$1.140 per Hour
Quadruple Extra Large	\$1.800 per Hour	\$2.280 per Hour
High-CPU On-Demand Instances		
Medium	\$0.165 per Hour	\$0.285 per Hour
Extra Large	\$0.660 per Hour	\$1.140 per Hour
Cluster Compute Instances		
Quadruple Extra Large	\$1.300 per Hour	\$1.610 per Hour
Eight Extra Large	\$2.400 per Hour	\$2.970 per Hour
Cluster GPU Instances		
Quadruple Extra Large	\$2.100 per Hour	\$2.600 per Hour
High-I/O On-Demand Instances		
Quadruple Extra Large	\$3.100 per Hour	\$3.580 per Hour

Come utilizzare Amazon EC2

Per utilizzare Amazon EC2, è sufficiente:

- Selezionare un'immagine pre-configurata, basata su modelli Amazon Machine Image (AMI)
 - Oppure creare un'immagine AMI contenente le applicazioni, le librerie, i dati e le impostazioni di configurazione associati desiderati
- Configurare l'accesso di sicurezza e di rete sulla propria istanza Amazon EC2
- Scegliere il tipo di istanza/e che si desidera
- Avviare, terminare, e monitorare le istanze dell'AMI utilizzando il servizio Web API o svariati strumenti di gestione forniti
- Stabilire se si desidera eseguire in più località geografiche, utilizzare indirizzi IP statici, o collegare un blocco di storage persistente alle istanze create
- Pagare solo per le risorse che si consumano effettivamente, come ore-CPU o il trasferimento di dati

Navigation

Region: US East (N. Virginia)

EC2 Dashboard

- Events
- INSTANCES
 - Instances
 - Spot Requests
 - Reserved Instances
- IMAGES
 - AMIs
 - Bundle Tasks
- ELASTIC BLOCK STORE
 - Volumes
 - Snapshots
- NETWORK & SECURITY
 - Security Groups
 - Elastic IPs
 - Placement Groups
 - Load Balancers
 - Key Pairs
 - Network Interfaces

Amazon EC2 Console Dashboard

Getting Started

To start using Amazon EC2 you will want to launch a virtual server, known as an Amazon EC2 instance.

[Launch Instance](#)

Note: Your instances will launch in the US East (N. Virginia) region.

Service Health

Service Status

Current Status	Details
Amazon EC2 (US East - N. Virginia)	[RESOLVED] Increased latencies and error rates View complete service health details

Availability Zone Status

Current Status	Details
us-east-1a	Availability zone is operating normally
us-east-1b	Availability zone is operating normally
us-east-1c	Availability zone is operating normally
us-east-1d	Availability zone is operating normally
us-east-1e	Availability zone is operating normally

My Resources

You are using the following Amazon EC2 resources in the US East (N. Virginia) region: [Refresh](#)

0 Running Instances	0 Elastic IPs
0 EBS Volumes	0 EBS Snapshots
1 Key Pair	0 Load Balancers
0 Placement Groups	2 Security Groups

Events

US East (N. Virginia): **No events** [Refresh](#)

Related Links

- > [Getting Started Guide](#)
- > [Documentation](#)
- > [All EC2 Resources](#)
- > [Find software on AWS Marketplace](#)
- > [Forums](#)
- > [Feedback](#)
- > [Report an Issue](#)

Navigation
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Amazon EC2 Console Dashboard
Getting Started My Resources

To start using Amazon EC2, you must first create an Amazon EC2 instance.

You are using the following Amazon EC2 resources in the US East (N. Virginia)

- 0 Elastic IPs
- 0 EBS Snapshots
- 0 Load Balancers
- 2 Security Groups

Service Health

Service Status

Current Status

- Amazon EC2 (US East (N. Virginia))

Availability Zone Status

Current Status

- us-east-1a
- us-east-1b
- us-east-1c
- us-east-1d
- us-east-1e









Request Instances Wizard


Cancel X

CHOOSE AN AMI INSTANCE DETAILS CREATE KEY PAIR CONFIGURE FIREWALL REVIEW

Choose an Amazon Machine Image (AMI) from one of the tabbed lists below by clicking its **Select** button.

Quick Start My AMIs Community AMIs AWS Marketplace

	Amazon Linux AMI 2012.03 The Amazon Linux AMI 2012.03 is an EBS-backed, PV-GRUB image. It includes Linux 3.2, AWS tools, and repository access to multiple versions of MySQL, PostgreSQL, Python, Ruby, and Tomcat. Root Device Size: 8 GB	<input checked="" type="radio"/> 64 bit <input type="radio"/> 32 bit	 <input type="button" value="Select"/>
	Red Hat Enterprise Linux 6.3 Red Hat Enterprise Linux version 6.3, EBS-boot. Root Device Size: 7 GB	<input checked="" type="radio"/> 64 bit <input type="radio"/> 32 bit	<input type="button" value="Select"/>
	SUSE Linux Enterprise Server 11 SUSE Linux Enterprise Server 11 Service Pack 2 basic install, EBS boot with Amazon EC2 AMI Tools preinstalled; Apache 2.2, MySQL 5.0, PHP 5.3, and Ruby 1.8.7 Root Device Size: 10 GB	<input checked="" type="radio"/> 64 bit <input type="radio"/> 32 bit	<input type="button" value="Select"/>
	Ubuntu Server 12.04.1 LTS Ubuntu Server 12.04.1 LTS with support available from Canonical (http://www.ubuntu.com/cloud/services). Root Device Size: 8 GB	<input checked="" type="radio"/> 64 bit <input type="radio"/> 32 bit	 <input type="button" value="Select"/>
	Ubuntu Server 11.10 Ubuntu Server version 11.10, with support available from Canonical	<input checked="" type="radio"/> 64 bit <input type="radio"/> 32 bit	 <input type="button" value="Select"/>

 Free tier eligible if used with a micro instance. See [AWS free tier](#) for complete details and terms.

Request Instances Wizard

Cancel X

CHOOSE AN AMI

INSTANCE DETAILS

CREATE KEY PAIR

CONFIGURE FIREWALL

REVIEW

Provide the details for your instance(s). You may also decide whether you want to launch your instances as "on-demand" or "spot" instances.

Number of Instances:

Instance Type:

Micro (t1.micro, 613 MiB) ▼

Launch as an EBS-Optimized instance (additional charges apply):

Not supported for this instance type

Launch Instances

EC2 Instances let you pay for compute capacity by the hour with no long term commitments. This transforms what are commonly large fixed costs into much smaller variable costs.

Launch into:

EC2 VPC

Availability Zone:

No Preference ▼

Request Spot Instances

< Back

Continue



Request Instances Wizard

Cancel 

CHOOSE AN AMI

INSTANCE DETAILS

CREATE KEY PAIR

CONFIGURE FIREWALL

REVIEW

Number of Instances: 1

Availability Zone: No Preference

Advanced Instance Options

Here you can choose a specific [kernel](#) or [RAM disk](#) to use with your instances. You can also choose to enable CloudWatch Detailed Monitoring or enter data that will be available from your instances once they launch.

Kernel ID: Use Default 

RAM Disk ID: Use Default 

Monitoring: Enable CloudWatch detailed monitoring for this instance
([additional charges will apply](#))


User Data: Mario Reale

as text

as file

base64 encoded

Termination Protection: Prevention against accidental termination.

Shutdown Behavior: Stop 

IAM Role:  None 

[< Back](#)

Continue 



Request Instances Wizard

Cancel

CHOOSE AN AMI
INSTANCE DETAILS
CREATE KEY PAIR
CONFIGURE FIREWALL
REVIEW

Number of Instances: 1

Availability Zone: No Preference

Storage Device Configuration

Your instance will be launched with the following storage device settings. Edit these settings to add EBS volumes, instance store volumes, or edit the settings of the root volume.


Type	Device	Snapshot ID	Size	Volume Type	IOPS	Delete on Termination
Root	/dev/sda1	snap-6eaab211	7GiB	standard		true
Ephemeral	/dev/sdf	instance store volume: ephemeral0				Remove
Ephemeral	/dev/sdg	instance store volume: ephemeral1				Remove

Edit

< Back




Continue

Request Instances Wizard

Cancel 

CHOOSE AN AMI
INSTANCE DETAILS
CREATE KEY PAIR
CONFIGURE FIREWALL
REVIEW

Add tags to your instance to simplify the administration of your EC2 infrastructure. A form of metadata, tags consist of a case-sensitive key/value pair, are stored in the cloud and are private to your account. You can create user-friendly names that help you organize, search, and browse your resources. For example, you could define a tag with key = Name and value = Webserver. You can add up to 10 unique keys to each instance along with an optional value for each key. For more information, go to [Using Tags](#) in the *EC2 User Guide*.


Key (127 characters maximum)	Value (255 characters maximum)	Remove
<input type="text" value="Name"/>	<input type="text"/>	
<input type="text" value="Tutorial"/>	<input type="text" value="Test Instance"/>	
<input type="text"/>	<input type="text"/>	

[Add another Tag.](#) (Maximum of 10)

[< Back](#)

Continue 

Request Instances Wizard

Cancel 

CHOOSE AN AMI

INSTANCE DETAILS

CREATE KEY PAIR

CONFIGURE FIREWALL

REVIEW

Public/private key pairs allow you to securely connect to your instance after it launches. To create a key pair, enter a name and click **Create & Download your Key Pair**. You will then be prompted to save the private key to your computer. Note, you only need to generate a key pair once - not each time you want to deploy an Amazon EC2 instance.


Choose from your existing Key Pairs

Your existing Key Pairs*:

Create a new Key Pair

Proceed without a Key Pair

[< Back](#)

Continue 



You are viewing the following Amazon EC2 resources in t

Request Instances Wizard

Cancel



Security groups determine whether a network port is open or blocked on your instances. You may use an existing security group, or we can help you create a new security group to allow access to your instances using the suggested ports below. Add additional ports now or update your security group anytime using the Security Groups page.

Choose one or more of your existing Security Groups

sg-01656768 - default
sg-876567ee - quick-start-1

(Selected groups: sg-876567ee)

Create a new Security Group


[< Back](#)[Continue](#)

Request Instances Wizard

Cancel X

- CHOOSE AN AMI
- INSTANCE DETAILS
- CREATE KEY PAIR
- CONFIGURE FIREWALL
- REVIEW**

Please review the information below, then click **Launch**.

AMI:  Red Hat AMI ID ami-cc5af9a5 (x86_64)

Name: Red Hat Enterprise Linux 6.3

Description: Red Hat Enterprise Linux version 6.3, EBS-boot. [Edit AMI](#)

Number of Instances: 1

Availability Zone: No Preference

Instance Type: Micro (t1.micro)

Instance Class: On Demand

[Edit Instance Details](#)

EBS-Optimized: No

Monitoring: Disabled

Termination Protection: Disabled

Tenancy: Default

Kernel ID: Use Default

Shutdown Behavior: Stop

RAM Disk ID: Use Default

Network Interfaces:

**Secondary IP
Addresses:**

User Data: Mario Reale

IAM Role:

[Edit Advanced Details](#)

Key Pair Name: marioreale

[Edit Key Pair](#)

< Back

Launch 



My Resources

You are using the following Amazon EC2 resources in the region:

Launch Instance Wizard

Cancel

Your instances are now launching.

Instance ID(s): i-96c68eeb

Note: Your instances may take a few minutes to launch, depending on the software you are running.

Note: Usage hours on your new instances will start immediately and continue to accrue until you stop or terminate your instances.

You can perform the following tasks while your instances are launching:

> [Create Status Check Alarms](#)

You can use status check alarms to be notified if these instances fail status checks (additional charges may apply).

> [Create EBS Volumes](#) (Additional charges may apply.)

> [View your instances on the Instances page](#)

Close



Availability zone is operating normally



Navigation

Region:

US East (N. Virginia) ▾

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▾ INSTANCES

Instances

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My Instances

Launch Instance

Instance Actions ▾

Show/Hide

Refresh

Help

Viewing: All Instances ▾

All Instance Types ▾

Search

⏪ ⏩ 1 to 1 of 1 Instances ⏪ ⏩

	Name	Instance	AMI ID	Root Device	Type	State	Status Checks	Alarm Status
<input type="checkbox"/>	<i>empty</i>	i-96c68eeb	ami-cc5af9a5	ebs	t1.micro	running	initializing...	<i>none</i>

No EC2 Instances selected.

Select an instance above



Navigation

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US East (N. Virginia) ▾

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My Instances

Launch Instance

Instance Actions ▾

Viewing: All Instances

<input type="checkbox"/>	Name	Ins
<input checked="" type="checkbox"/>	empty	

1 EC2 Instance selected

EC2 Instance

ec2-50-16-17

Description

AMI:

Zone:

Type:

Scheduled Events:

VPC ID:

Source/Dest. Check:

Placement Group:

Instance Management

[Connect](#)[Get System Log](#)[Get Windows Admin Password](#)[Create Image \(EBS AMI\)](#)[Add/Edit Tags](#)[Change Security Group](#)[Change Source/Dest. Check](#)[Bundle Instance \(instance store AMI\)](#)[Launch More Like This](#)[Disassociate IP Address](#)[Change Termination Protection](#)[View/Change User Data](#)[Change Instance Type](#)[Change Shutdown Behavior](#)[Attach Network Interface](#)[Detach Network Interface](#)[Manage Private IP Addresses](#)

Instance Actions

[Terminate](#)[Reboot](#)[Stop](#)[Start](#)

CloudWatch Monitoring

[Enable Detailed Monitoring](#)[Disable Detailed Monitoring](#)[Add/Edit Alarms](#)

Search

Name	Type	State	Status Checks	Alarm Status	...
ec2-50-16-17	t1.micro	running	2/2 checks passed	none	basic

ami-cc5af9a5

Alarm Status

Security Group

State:

Owner:

Subnet ID:

Virtualization

Reservation

Instances

Launch Instance	Instance Actions											
Filtering:	All Instances	All Instance Types	Search									
Name	Instance	AMI ID	Root Device	Type	State	Status Checks	Alarm Status	Monitoring	Security Groups	Key Pairs		
empty	i-96c68eeb	ami-cc5af9a5	ebs t1.micro	running	2/2 checks passed	none	basic	quick-start-1	marioarele	paravirtual		

Connect to an instance

Cancel

Instance: i-96c68eeb

- ▶ Connect with a standalone SSH Client
- ▼ Connect from your browser using the Java SSH Client (Java Required)

Enter the required information in the fields below to connect to your instance. AWS automatically detects the key pair name, and public DNS for your instance. You need to enter location and name of the .pem file containing your private key.

Public DNS: ec2-50-16-177-253.compute-1.amazonaws.com

User name:

Key name: marioarele

Private key path:

Example: C:\Users\username\Downloads
\marioarele.pem

Save key location: Stored in browser cache.

EC2 Instance selected.

EC2 Instance: i-96c68eeb

ec2-50-16-177-253.compute-1.amazonaws.com

Description | Status Checks | Monitoring | Tags

AMI: RHEL-6.3-Starter-x86_64

Zone: us-east-1a

Type: t1.micro

Scheduled Events: No scheduled events

VPC ID: -

Source/Dest. Check: -

Placement Group: -

RAM Disk ID: -

Virtualization: paravirtual

Reservation: r-3d964e5b

Platform: -

Connect to an instance Cancel

Instance: `i-8a1e55f7`

[Connect with a standalone SSH Client](#)

[Connect from your browser using the Java SSH Client \(Java Required\)](#)

Enter the required information in the fields below to connect to your instance. AWS automatically detects the key pair name, and public DNS for your instance. You need to enter location and name of the .pem file containing your private key.

Public DNS `ec2-107-21-196-77.compute-1.amazonaws.com`

User name:

Key name: `mariotutorial`

Private key path:

Example: `C:\Users\username\Downloads\mariotutorial.pem`

Save key location: Stored in browser cache.

[Launch SSH Client](#)

[Close](#)

```

root@domU-12-31-39-00-B1-43:~ [80x24]
File Edit Settings Plugins Tunnels Help

MindTerm home: C:\Users\mario\mindterm\
Initializing random generator, please wait...done
Connected to server running SSH-2.0-OpenSSH_5.3

Server's hostkey (ssh-rsa) fingerprint:
openssh md5: 13:5b:e2:f9:45:47:0b:17:2c:56:27:33:94:b2:f4:7b
bubblebabble: xiros-fikab-lonyl-comep-mybap-sykes-mipos-vyhal-nafum-loroc-

[root@domU-12-31-39-00-B1-43 ~]#

```

Secondo Esempio: GoGrid



- GoGrid è un Cloud provider IaaS americano
 - con una sede (dal 2012) anche ad Amsterdam
- GoGrid offre un servizio di infrastruttura cloud
- Gestisce macchine Linux e Windows
 - Macchine virtuali gestite da server pannello di controllo ed API RESTful
- Offre:
 - Cloud Servers
 - Dedicated Servers
 - Cloud Storage
 - Load Balancing

Servizi forniti da GoGrid

- Cloud Server
 - Server Cloud pre-configurati - forniscono risorse IaaS in pochi secondi
 - immagini di server Windows e Linux in vari formati
- Server hosted dedicati
- Firewall
 - Sia software che hardware, completamente gestiti
- Bilanciatori di carico
 - Soluzioni di Load balancing a vari livelli
- Cloud Storage
 - On-demand, scalabile, completamente gestito dall' interfaccia di management
- Soluzioni CDN – Content Delivery Network
- Dispongono di 21 PoPs nel mondo per l' hosting web su CDN dedicata
 - Replica e pre-distribuzione di contenuti web worldwide
 - Enhanced streaming
 - Expedite rich media content delivery
 - CNAME support : maschera della URL GoGrid con quella custom per il cliente
- ...

Come utilizzare GoGrid Cloud Server

Per utilizzare GoGrid Cloud Server, è sufficiente:

- Ci si registra al sistema
- Ci si logga sulla management console : <https://my.gogrid.com/grid>
- Si clicca sul bottone «Add»
- Si seleziona tra gli oggetti proposti «Cloud Server»
- Si seleziona una dei tre data center proposti (US west, US east, EU west)
- Si seleziona dal Catalogo l'immagine che si vuole istanziare, specificando:
 - Sistema Operativo e versione
 - Nota: Se l'immagine non è fornita direttamente da GoGrid ma da un partner, bisogna sottoscrivere un Terms of Service
- Si Seleziona un IP pubblico da utilizzare
- Si aggiungono dei metadati (nome del server, descrizione..)
- Si specifica la quantità di RAM richiesta
- Viene creata l'immagine server e compare nella management console
- La si fa partire e l'interfaccia propone poi ulteriori opzioni di management come:
 - Scale, Restart, Power management, tools..
- Esiste una buona guida per nuovi utenti su https://wiki.gogrid.com/wiki/index.php/Getting_Started_Guide

GoGrid Cloud Server: quanto costa ?

Product	RAM	Cores	Storage Space	Hourly	Monthly Prepaid	Semiannual Prepaid	Annual Prepaid
X-Small	.5 GB	0.5	25 GB	\$0.04	\$18.13	\$99.69	\$181.25
Small	1 GB	1	50 GB	\$0.08	\$36.25	\$199.38	\$362.50
Medium	2 GB	2	100 GB	\$0.16	\$72.50	\$398.75	\$725.00
Large	4 GB	4	200 GB	\$0.32	\$145.00	\$797.50	\$1,450.00
X-Large	8 GB	8	400 GB	\$0.64	\$290.00	\$1,595.00	\$2,900.00
XX-Large	16 GB	16	800 GB	\$1.28	\$580.00	\$3,190.00	\$5,800.00
XXX-Large	24 GB	24	800 GB	\$1.92	\$870.00	\$4,785.00	\$8,700.00

WE MAKE CLOUD INFRASTRUCTURE EASY. REALLY EASY.



CLOUD HOSTING

The easiest way to deploy complex infrastructure.

DEDICATED HOSTING

Innovative options to power flexible dedicated/cloud architectures.

PRIVATE CLOUD

Leverage the benefits of cloud computing plus physical resource separation.

GoGrid Cloud Hosting

GoGrid's cloud hosting platform provides automated provisioning of infrastructure over the Internet. You can provision and scale virtual and physical servers, storage, networking, load balancing, and firewalls in real time across multiple data centers using a web-based management console or GoGrid's API. GoGrid infrastructure is ideal if you need instant access to highly available multi-server environments. You can access and operate it using standard network protocols and IP addresses—no new technical skills or specialized equipment are required.



Robust Cloud Infrastructure

From cloud servers, to load balancers and firewalls, to cloud storage, GoGrid offers the most complete and flexible solution on the market.

See for Yourself

We are proven cloud architects, here to help with all your cloud hosting infrastructure needs.

START YOUR CLOUD SIGN UP NOW

PRODUCT COMPONENTS

Cloud Servers

Dedicated Servers

Load Balancers



Account Summary

Your Billing Cycle:

10/06/2012 to 11/06/2012



Memory

RAM Plan: Pay As You Go

RAM Allotment: 0 GB Hrs

GB in Use: 1.00

GB Hours to Date: 14

Transfer

Transfer Plan: Pay As You Go

Transfer Allotment: 0 GB

GB Transfer to Date: 0



add

Load Balancers

Web/App Servers



tutorial2
173.1.175.4



Test server Demo tut
173.1.175.2

Quick Link

 [Your Network Settings](#)


 [GoGrid CDN](#)

 [GoGrid Wiki](#)

Order Additional Service

 [Request more IPs](#)

 [Order Fortinet Firewall](#)

 [Order CloudLink](#)



Account Summary

Your Billing Cycle:

10/06/2012 to 11/06/2012



Memory

RAM Plan: Pay As You Go

RAM Allotment: 0 GB Hrs

GB in Use: 1.00

GB Hours to Date: 14

Transfer

Transfer Plan: Pay As You Go

Transfer Allotment: 0 GB

GB Transfer to Date: 0



add



scale



save



restart



tools



delete

Load Balancers



Test server Demo tut

test server for cloud tutorial



CentOS 5.3 (64-bit)

1GB RAM, 1 cores, 50 GB disk

ASAP V1.2 - Cranium Solutions



US-West-1



173.1.175.2

Test server Demo tut
173.1.175.2

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Agree

Cancel

Cloud Servers

Select a Cloud Server Term:

[What's This?](#)

Hourly

Count	Size	RAM	Cores (Linux)	Cores (Windows)	Hard Drive
<input type="checkbox"/>	X-Small	512MB	.5	.5	25GB
<input type="checkbox"/>	Small	1GB	1	1	50GB
<input type="checkbox"/>	Medium	2GB	2	2	100GB
<input type="checkbox"/>	Large	4GB	4	4	200GB
<input type="checkbox"/>	X-Large	8GB	8	8	400GB
<input type="checkbox"/>	XX-Large	16GB	16	8	800GB
<input type="checkbox"/>	XXX-Large	24GB	24	8	800GB

Load Balancers

[What's This?](#)

[Add Load Balancing](#)

Cloud Storage

[What's This?](#)

[Add Cloud Storage](#)

Data Transfer

Total Monthly Outbound Transfer:

GB/mo

Total Monthly Inbound Transfer:

GB/mo

Estimated Costs

	Selected Term	Monthly
Cloud Servers:		0.00
Cloud Storage:		0.00
Data Transfer:		0.00
Total:	0.00	0.00

* Estimated costs do not reflect optional licensing fees such as Microsoft SQL or select partner GoGrid server images (PGSIs).

Load Balancers

Web/App Servers

Database Servers



tutorial2
173.1.175.4

Are you sure you want
to log off?



Yes, Log Off



No, Cancel



«E non hai visto ancora niente !!
Vieni, Vieni, da un'occhiata al nostro Cloud Storage...
Se ci metti 10 GB di dati e torni dopo un mese,
diventeranno 1000 fiorini d'oro.....»

Cloud Storage

- Sicuramente il Cloud Storage è uno dei tool ICT del momento
- E' un trend abbastanza consolidato del mercato
 - Spostare lo spazio di archiviazione dalle macchine, locale, verso l' online
- Esiste sul mercato - anche qui – una ricca moltitudine di servizi di Cloud storage disponibili per gli utenti
- Con accezioni funzionali e sfumature diverse a seconda di:
 - Shipped con l' OS (i-Cloud)
 - Integrate in un tool più esteso funzionalmente (Google Drive)
 - Client mobile associato
 - Client di sincronizzazione PC associato
 - Policy di pagamento / quota gratuita
 - Policy di reclutamento nuovi utenti
 - Disponibilità complessiva di spazio storage
 - Possibilità di condivisione di files o directory (implementate in maniere distinte)

Cloud Storage : Esempi (solo..una parte...)

oxygen
CLOUD

livedrive | Cloud Storage for Everyone

SafeSync
TREND MICRO

ubuntu
one

cubby
beta

SugarSync



Google Drive

amazon cloud drive

box



CARBONITE

memopal
online backup

OpenDrive

storgrid Cloud
Online Backup Service

mozy



iCloud

elephantdrive



jungledrive



Dropbox

A Drive



SkyDrive

ZumoDrive

sparkleshare



SyncAny

Esempio: come utilizzare DropBox

Per utilizzare DropBox, è sufficiente:

- Registrarsi al sistema – email da confermare - su <http://www.dropbox.com>
- Ci si può connettere alla Web Interface <http://www.dropbox.com>
- E si può installare un client per PC
 - Di fatto appare come un folder del Sistema Operativo
 - I file caricati sul folder sono sincronizzati sul server DropBox
- L' utilizzo – in piena filosofia Cloud – è semplice ed intuitivo
- C' è una quota storage gratuita (2GB), più ulteriori quote a pagamento
- E' accessibile da mobile device (iOS, Android)
- Si possono condividere singoli file o interi folder con collaboratori
- Esiste di default una sottodirectory «Public» dove qualunque file lì posizionato ha un link accessibile pubblico : basta spedirlo ed il file è accessibile a chi si desidera



Dropbox



Watch a Video

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Free for [Windows](#), [Mac](#), [Linux](#), and [Mobile](#)



Dropbox



Watch a Video

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 [Sign in](#) ▼

 Remember me














[Sign in](#)

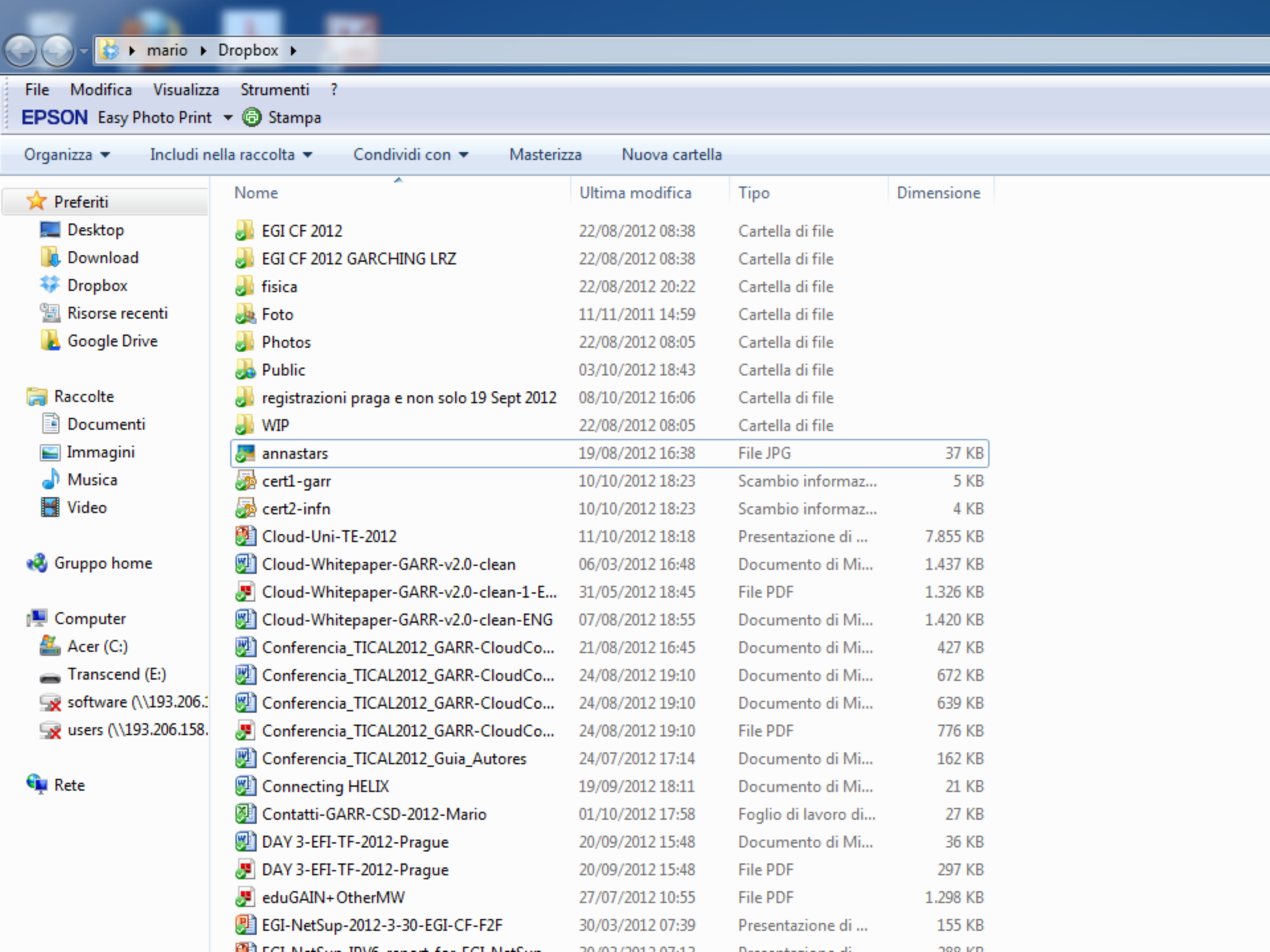
[Create an account](#)

-  [Dropbox](#)
-  [Sharing](#)
-  [Links](#)
-  [Events](#)
-  [Get Started](#)

Dropbox



Name ▲	Kind	Modified
 EGI CF 2012	folder	--
 EGI CF 2012 GARCHING LRZ	folder	--
 fisica	folder	--
 Foto	shared folder	--
 Photos	folder	--
 Public	folder	--
 registrazioni praga e non solo 19 Sept 2012	folder	--
 WIP	folder	--
 annastars.jpg	image jpg	8/19/2012 4:38 PM
 cert1-garr.p12	file p12	Yesterday 6:23 PM
 cert2-infn.p12	file p12	Yesterday 6:23 PM
 Cloud-Uni-TE-2012.ppt	document ppt	3 hrs ago
 Cloud-Whitepaper-GARR-v2.0-clean-1-ENG.pdf	document pdf	5/31/2012 6:45 PM



File Modifica Visualizza Strumenti ?

EPSON Easy Photo Print Stampa

Organizza Includi nella raccolta Condividi con Masterizza Nuova cartella

★ Preferiti

- Desktop
- Download
- Dropbox
- Risorse recenti
- Google Drive

Raccolte

- Documenti
- Immagini
- Musica
- Video

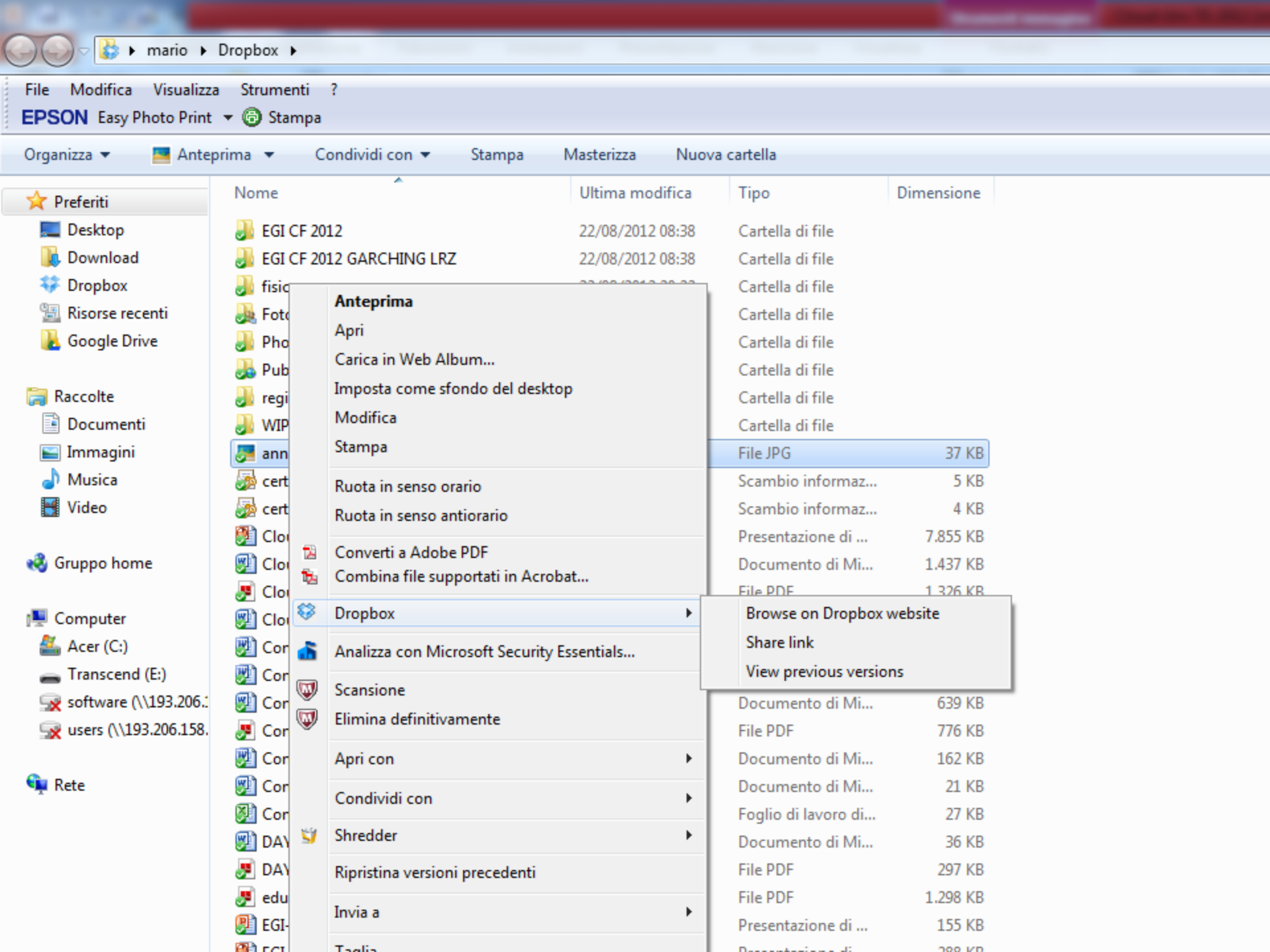
Gruppo home

Computer

- Acer (C:)
- Transcend (E:)
- software (\\193.206.158.100)
- users (\\193.206.158.100)

Rete

Nome	Ultima modifica	Tipo	Dimensione
EGI CF 2012	22/08/2012 08:38	Cartella di file	
EGI CF 2012 GARCHING LRZ	22/08/2012 08:38	Cartella di file	
fisica	22/08/2012 20:22	Cartella di file	
Foto	11/11/2011 14:59	Cartella di file	
Photos	22/08/2012 08:05	Cartella di file	
Public	03/10/2012 18:43	Cartella di file	
registrazioni praga e non solo 19 Sept 2012	08/10/2012 16:06	Cartella di file	
WIP	22/08/2012 08:05	Cartella di file	
annastars	19/08/2012 16:38	File JPG	37 KB
cert1-garr	10/10/2012 18:23	Scambio informaz...	5 KB
cert2-infn	10/10/2012 18:23	Scambio informaz...	4 KB
Cloud-Uni-TE-2012	11/10/2012 18:18	Presentazione di ...	7.855 KB
Cloud-Whitepaper-GARR-v2.0-clean	06/03/2012 16:48	Documento di Mi...	1.437 KB
Cloud-Whitepaper-GARR-v2.0-clean-1-E...	31/05/2012 18:45	File PDF	1.326 KB
Cloud-Whitepaper-GARR-v2.0-clean-ENG	07/08/2012 18:55	Documento di Mi...	1.420 KB
Conferencia_TICAL2012_GARR-CloudCo...	21/08/2012 16:45	Documento di Mi...	427 KB
Conferencia_TICAL2012_GARR-CloudCo...	24/08/2012 19:10	Documento di Mi...	672 KB
Conferencia_TICAL2012_GARR-CloudCo...	24/08/2012 19:10	Documento di Mi...	639 KB
Conferencia_TICAL2012_GARR-CloudCo...	24/08/2012 19:10	File PDF	776 KB
Conferencia_TICAL2012_Guia_Autores	24/07/2012 17:14	Documento di Mi...	162 KB
Connecting HELIX	19/09/2012 18:11	Documento di Mi...	21 KB
Contatti-GARR-CSD-2012-Mario	01/10/2012 17:58	Foglio di lavoro di...	27 KB
DAY 3-EFI-TF-2012-Prague	20/09/2012 15:48	Documento di Mi...	36 KB
DAY 3-EFI-TF-2012-Prague	20/09/2012 15:48	File PDF	297 KB
eduGAIN+ OtherMW	27/07/2012 10:55	File PDF	1.298 KB
EGI-NetSup-2012-3-30-EGI-CF-F2F	30/03/2012 07:39	Presentazione di ...	155 KB
EGI-NetSup-IPv6-annex-for-EGI-NetSup	30/03/2012 07:12	Presentazione di ...	288 KB



mario > Dropbox >

File Modifica Visualizza Strumenti ?

EPSON Easy Photo Print Stampa

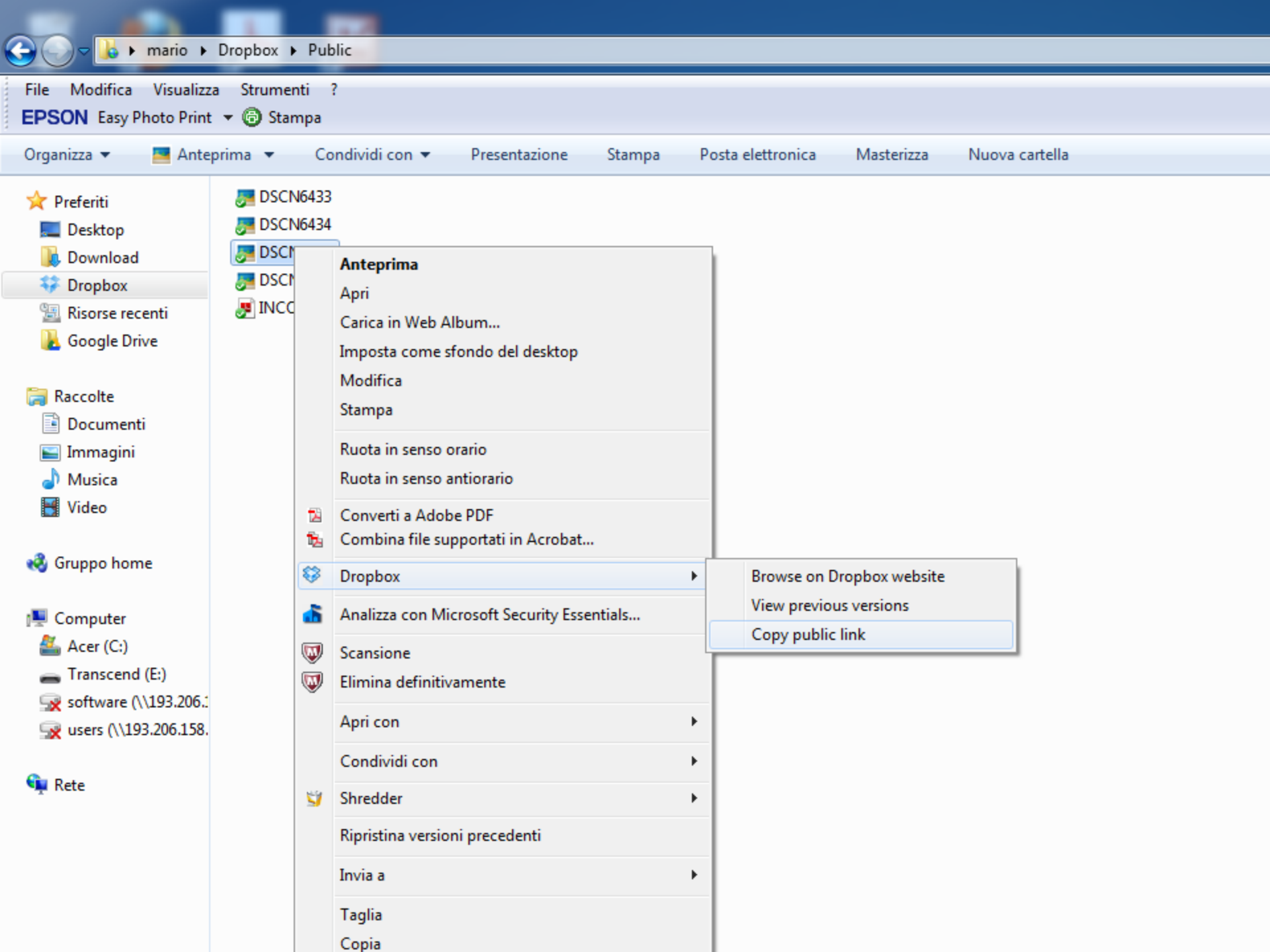
Organizza Anteprema Condividi con Stampa Masterizza Nuova cartella

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 - Risorse recenti
 - Google Drive
- Raccolte
 - Documenti
 - Immagini
 - Musica
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- Gruppo home
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 - users (\\193.206.158.100)
- Rete

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EGI CF 2012 GARCHING LRZ	22/08/2012 08:38	Cartella di file	
fisio	22/08/2012 08:38	Cartella di file	
Foto		Cartella di file	
Pho		Cartella di file	
Pub		Cartella di file	
regi		Cartella di file	
WIP		Cartella di file	
ann		File JPG	37 KB
cert		Scambio informaz...	5 KB
cert		Scambio informaz...	4 KB
Clo		Presentazione di ...	7.855 KB
Clo		Documento di Mi...	1.437 KB
Clo		File PDF	1.326 KB
Clo		Documento di Mi...	639 KB
Cor		File PDF	776 KB
Cor		Documento di Mi...	162 KB
Cor		Documento di Mi...	21 KB
Cor		Foglio di lavoro di...	27 KB
Cor		Documento di Mi...	36 KB
Cor		File PDF	297 KB
Cor		File PDF	1.298 KB
Cor		Presentazione di ...	155 KB
Cor		Presentazione di ...	288 KB

- Anteprema**
- Apri
- Carica in Web Album...
- Imposta come sfondo del desktop
- Modifica
- Stampa
- Ruota in senso orario
- Ruota in senso antiorario
- Converti a Adobe PDF
- Combina file supportati in Acrobat...
- Dropbox
- Analizza con Microsoft Security Essentials...
- Scansione
- Elimina definitivamente
- Apri con
- Condividi con
- Shredder
- Ripristina versioni precedenti
- Invia a
- Taglia

- Browse on Dropbox website
- Share link
- View previous versions



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Gruppo home

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- users (\\193.206.158.100\users)

Rete

- DSCN6433
- DSCN6434
- DSCN6435
- DSCN6436
- INCC...

- Anteprima**
- Apri
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- Copia

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- Copy public link



«Adesso hai capito, no ?

Io ho tutto quello che ti serve: si chiama Cloud.

Dammi solo il tuo numero di carta di credito, un consenso,
e sarà tuo. »