



Open Science Grid

# Security in the OSG

Kanye West aka Ye aka Yeezy aka Yeezus  
Getting Out Our Dreams Music, Inc.  
Los Angeles, CA

# The Real Kanye?

Nope, he's a decoy that  
lets me concentrate on  
making dope music



Source: <http://lensng.com/wp-content/uploads/2016/07/mgid-ao-image-mtv.jpg>



Open Science Grid

# Security in the OSG

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# What is Identity?

What is identification?

# What is identity?

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- Identification as proof of identity
- In the real world: (paparazzi) photos, SSN, driver's license, passport, etc.
- On the Internet: usernames (kanye\_stan\_9432), certificates

# How Do You Trust Someone's Identity?

Why didn't you trust me when I  
said I was Kanye West?

# How do you trust someone?

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- Prior knowledge/experience
- Appeal to authority
- Chain of trust
- Varying levels of trust



# #1: Authentication

Trusting identification



# #1: Authentication

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- Do you trust who I say I am?
- What about forged identities?
- Username + password, shared secret (public key cryptography), two-factor, etc.
- Authentication online often goes both ways



# #2: Authorization

Trusting identities

# #2: Authorization

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- Do I trust your identity?
- Do I trust you enough to give you root/admin?
- Authorization describes the privilege level of an identity



# #3: Security in the OSG

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- Certificate-based
- Transparent with OSG Connect
- VOs vet users
- Admins vet machines
- Certificate revocation of bad users/machines
- Traceability - audit data is kept to track who ran what where



# #4: Is Your Data Secure?

On a shared computer...

## #4: Is Your Data Secure?

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- Every participant in the OSG is vetted but...
- You are using a shared computer
- Take basic precautions (i.e. no world-writable files)
- NO sensitive data (e.g. HIPAA)



# Thanks!

# Questions?