



MIKE MORASKY

VALVE

MUSIC IN VALVE GAMES AND MEDIA

This Talk

- A broad, slightly historical overview
- Some of the things we've learned
- Minimizing barriers
- Going forward and what we're excited about
- Your input

Valve Splash Screen Video

MUSIC AS CRAFT

How We Work at Valve

- Free to experiment and execute
- Artists are fully integrated and involved
- Goals and constraints

Workflow

- Same as most audio and music artists

Workflow

- Same as most audio and music artists
- Iterating rough “mockups” in context





First Team Fortress 2 Trailer

Workflow

- Same as most audio and music artists
- Iterating rough “mockups” in context
- Acquiring (recording) hi-quality assets





How We Work

- Same as most audio and music artists
- Iterating rough “mockups” in context
- Acquiring (recording) hi quality assets
- Methodology depends on the scope and style / genre of the work

How We Work

- Same as most audio and music artists
- Iterating rough “mockups” in context
- Acquiring (recording) hi quality assets
- Methodology depends on the scope and style / genre of the work
- Mixing



Going Forward

- Expanding tools and software available through Steam

MUSIC AS DESIGN

Trailers

- Reinforcing art and game design:
 - Team Fortress 2
 - Left 4 Dead 2: community feedback

Trailers

- Reinforcing art and game design:
 - Team Fortress 2
 - Left 4 Dead 2: community feedback
 - Dota 2

Dota 2 Trailer

Life of its Own

- “Portal”: Jonathan Coulton and “Still Alive”

Life of its Own

- Portal: Jonathan Coulton and “Still Alive”
- Team Fortress 2

Team Fortress 2 simultaneous players, 9/30/2010 to 1/10/2014 ([view as .csv](#)) (hourly)

[<<](#) [<](#) [>](#) [>>](#) [>|](#) [\[+ \]](#) [\[- \]](#) [1y](#) [3m](#) [1m](#) [2w](#) [1w](#) [3d](#) [enhance](#)





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It's Beginning to Look a Lot Like Something

December 20, 2013 - TF2 Team



Search with Google..

SEARCH

MANN CO. SPOTLIGHT

FINE VIRTUAL GOODS FROM MANN CO.



Lights, camera, action.

TF2 started with nine mercenaries, each with his own distinct personality.

Because they live inside a frantic multiplayer shooter, though, the only facets of those personalities people got to see were the screaming, shooting, and being-on-fire parts. Enter the Meet the Team shorts, showcasing the mercs in their off-hours—arguing with their parents, barking orders at their head collections, or just strumming a guitar by the campfire. Also we made a movie about a sandwich.

[Check out the official YouTube channel >](#)

MEET THE TEAM



Meet the Scout

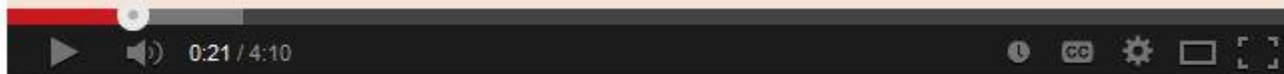


Meet the Soldier



Meet the Pyro





Meet the Medic



teamfortress · 10 videos



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233,408

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137,191



2,074



Team Fortress 2 Soundtrack | MEDIC!



OfficialTF2Wiki · 309 videos

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69,028

1,076,216

 7,307  77

Life of its Own

- Portal: Jonathan Coulton and “Still Alive”
- Team Fortress 2
- Left 4 Dead 2 and the “Midnight Riders”

MIDNIGHT RIDERS

THE BAND

THE MUSIC

TOUR BLOG

NEW ALBUM

THE STORE



OX
DRUMS



SMITTY
VOCALS, RHYTHM GUITAR



JAKE
BASS, KEYBOARDS



DUSTY
LEAD GUITAR

About the Band

In 1983, with their chart-topping songs and the grassroots support of their loyal fanbase, four young men from Galveston, Texas became the most popular band in

HIGH HEELS & BRUSHED STEEL THE GREATEST HITS



NOT AVAILABLE
IN STORES

NOT AVAILABLE
ONLINE

ONLY AVAILABLE
ON TOUR!!!



NO SALVATION FAIRGROUNDS TOUR

SEPT 1.Harvest, Texas

SEPT 2. .Black Mountain, Texas



Midnight Riders - Midnight Ride



MidnightRidersBand · 4 videos

 [Subscribe](#)

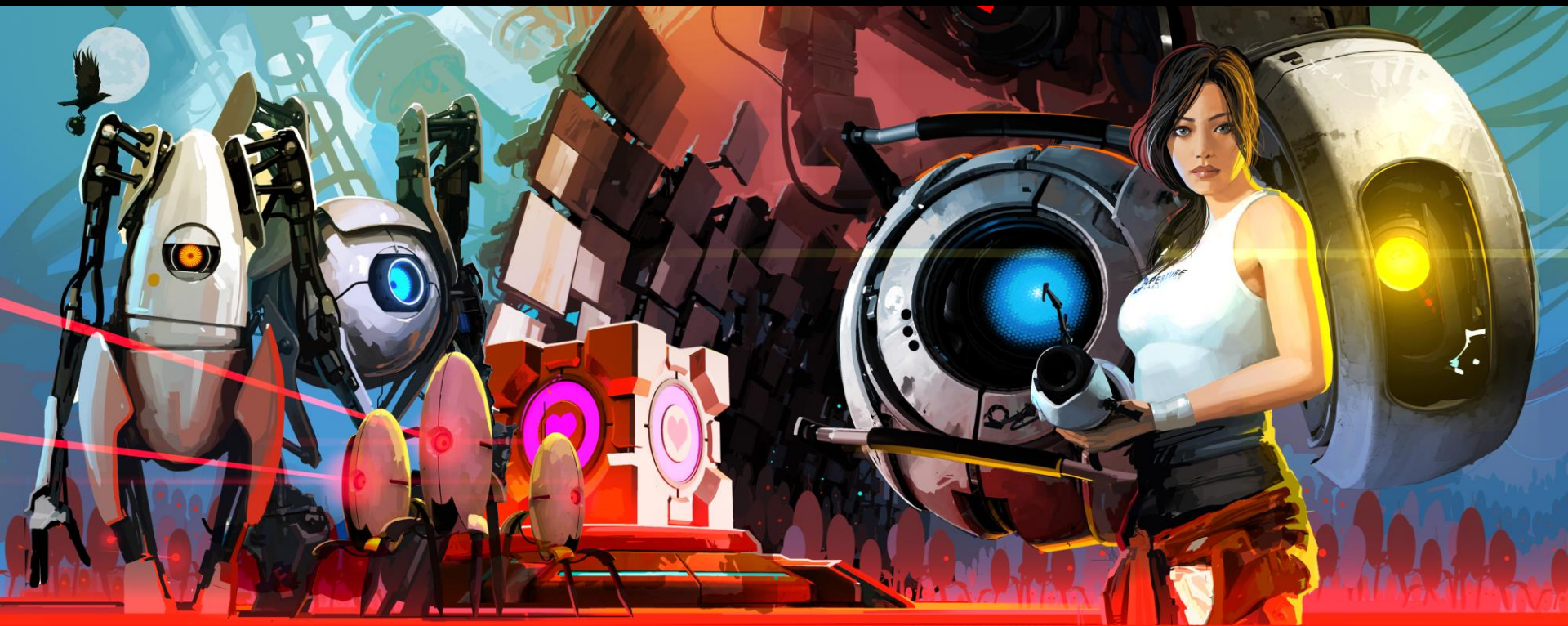
10,217

824,906

 5,421  59

Life of its Own

- Portal: Jonathan Coulton and “Still Alive”
- Team Fortress 2
- Left 4 Dead 2 and the “Midnight Riders”
- Portal 2 soundtrack



[SONGS TO TEST BY]

The background of the cover is a dark, industrial environment. A large, white, cylindrical object, resembling a portal gun or a piece of machinery, is suspended in the air, emitting a bright, yellowish light from its central opening. A small, dark figure of a person stands on a ledge in the distance, looking up at the light. The overall atmosphere is mysterious and futuristic.

PORTAL 2
SOUNDTRACK



The image is the cover art for the Portal 2 Soundtrack. It features the character Chell, a woman with long dark hair, wearing a white tank top and orange overalls. She is holding a portal gun and looking towards the viewer. In the background, there is a large, metallic, circular structure with a glowing blue light in the center, and a yellow light source on the right. The overall color palette is dominated by reds, oranges, and yellows, with a blue glow from the portal gun.

PORTAL 2

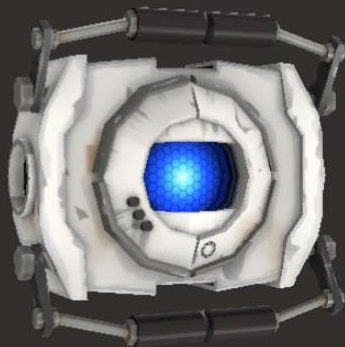
SOUNDTRACK

SONGS TO TEST BY
COLLECTORS EDITION

NEW ITEM ACQUIRED!

YOU RECEIVED A GIFT:

ITEM
#1



GENUINE AP-SAP

Level 16 Sapper

Mann Co. got a great deal from a nice lady in an abandoned science facility on a warehouse full of slightly used, possibly mildly defective sappers. Unlike our other sappers, the Ap-Sap is sentient, and will provide hours of lively, one-sided conversation while you're trying to work.

OPEN SPY LOADOUT...

OK, RESUME GAME

Going Forward

- Continue leveraging existing channels
- Explore more direct ways to share media

IN-GAME MUSIC

Music in L4D

- Making the music matter
- Every piece of music means something

Music in L4D

- Making the music matter
- Every piece of music means something
- The “Tank” theme



Music in L4D

- Making the music matter
- Every piece of music means something
- The “Tank” theme

Music in L4D

- Making the music matter
- Every piece of music means something
- The “Tank” theme
- “Special” infected motifs



Music in L4D

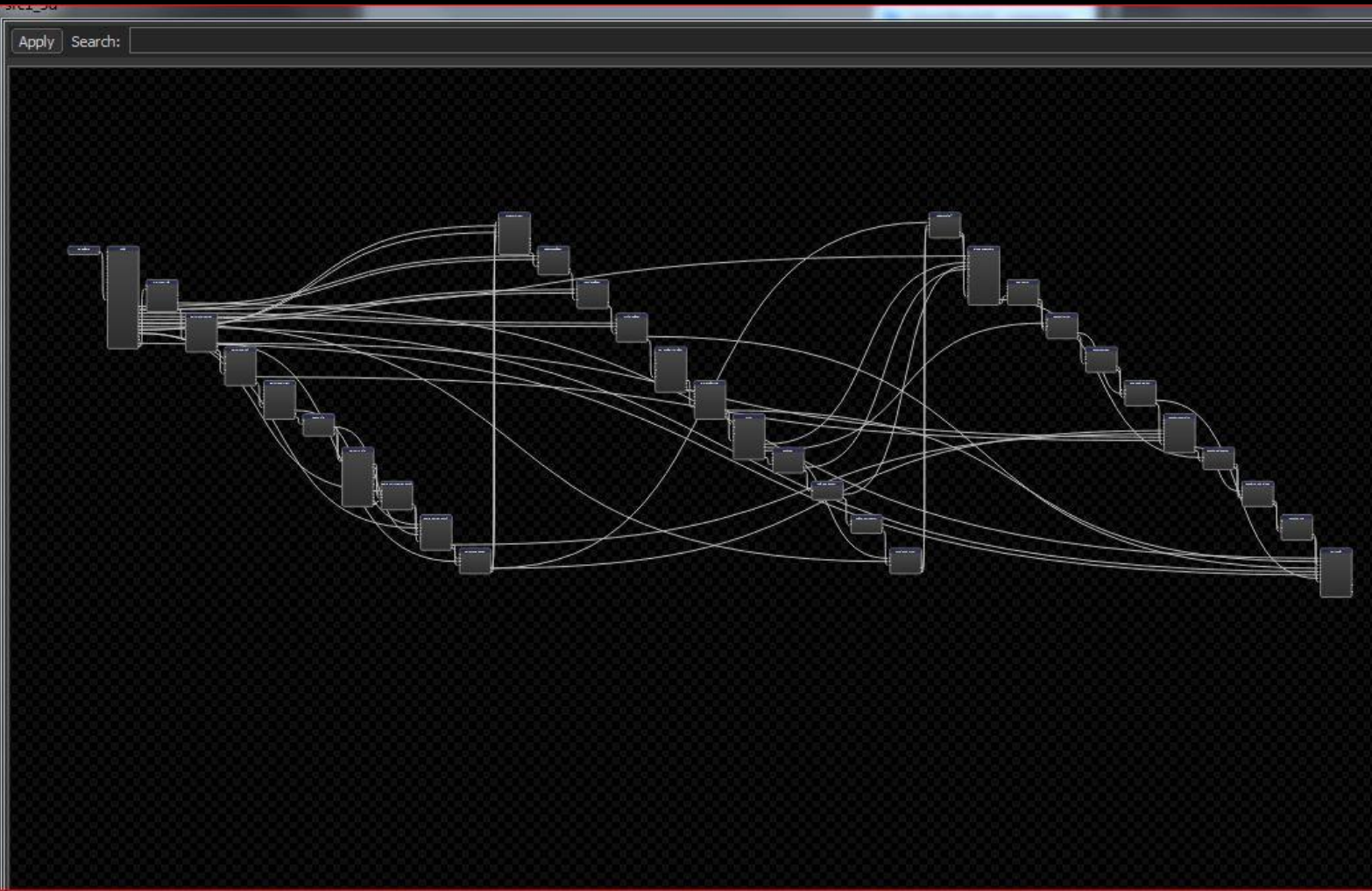
- Making the music matter
- Every piece of music means something
- The “Tank” theme
- “Special” infected motifs
- Experimentation was crucial

MUSIC AS SOFTWARE

The Music of Portal 2

- Prototype tool set

- calc_distant_dsp
- calc_falloff
- calc_occlusion
- calc_spatialize_speakers
- convar_get
- convar_set
- ctrl_switch3_float
- ctrl_switch3_float3
- ctrl_switch_float
- ctrl_switch_float3
- game_entity_info
- game_get_source_info
- iterate_merge_speakers
- math_accumulate12_float
- math_curve_2d_4knot
- math_delta
- math_filter_float
- math_float
- math_float3
- math_func_float
- math_random_float
- math_random_float3
- math_remap_float
- math_speakers
- math_string64
- math_velocity
- operator_override
- opvar_get_float
- opvar_get_float3
- opvar_get_info
- opvar_get_random_array_index
- opvar_get_string
- opvar_increment_float
- opvar_set_float
- opvar_set_float3
- opvar_set_string
- sms_start_vsnd
- sos_goto
- sos_import_stack
- sos_reference_stack
- sos_soundevent_info
- sos_stack_control



The Music of Portal 2

- Prototype tool set
- Encouraging exploration and “play”
- Game-play creates music
 - Repulsion Gel

Portal 2 Repulsion Gel Video

The Music of Portal 2

- Prototype tool set
- Encouraging exploration and “play”
- Game-play creates music.
 - Repulsion Gel
 - Phasing Lasers

Portal 2 Laser Phase Video

The Music of Portal 2

- Prototype tool set
- Encouraging exploration and “play”
- Game-play creates music.
 - Repulsion Gel
 - Phasing Lasers
- Again experimentation was crucial

Going Forward

- Evermore possibilities for exploration, particularly in VR
- Continued development of easier and more extensible tools for the artist

MUSIC IN ESPORTS

CS:GO

- Keep it simple and out of the way

CSGO Round Start Video

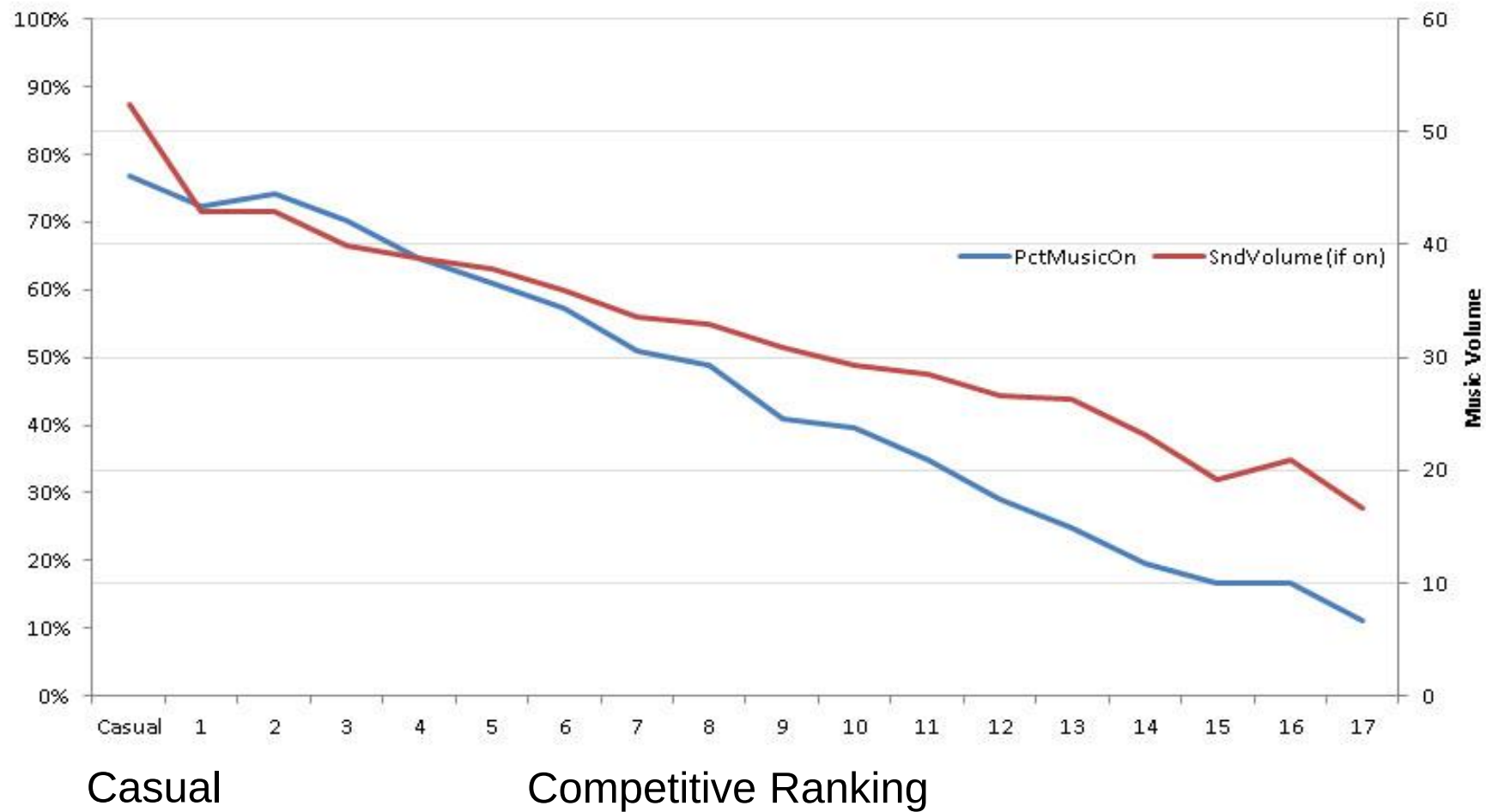
CS:GO

- Keep it simple and out of the way
- Expose some game state

CSGO Bomb Plant Video

CS:GO

- Keep it simple and out of the way
- Expose some game play data
- What the tracking data shows



Going Forward

- Adding more customization capabilities
- Spectators and streaming

Going Forward? (recap)

- More software and tools available via Steam
- More ways to share music and media
- Continued improvement of internal tools
- Customization features for serious players
- Attending to spectators
- Continued exploration of eSports, new games, VR via minimum barriers
- What are you looking for?



MIKE MORASKY

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MUSIC IN VALVE GAMES AND MEDIA