FORGING AUDIO WORKFLOW CHANGES ON DESTINY: RISE OF IRON

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Bungie

BUNGIE

DESTINY

INTRODUCTION

What is Rise of Iron?

- Destiny Expansion
- Developed by Bungie
- Released Sept. 20th 2016

THE CONVERSATION

The challenges of mixing new content:

- Last stage of audio development
- Audio room
- Multiple passes on all new content
- Navigating through content as it moves closer to ship date

THE PROCESS

Audio Dev Process:

- Plan and organize
- Recording Sessions
- Sound design (DAW)
- Implementation (Wwise)

- **Final Mix**
  - Last 3 weeks
  - Has to be experienced in-game

MULTIPLAYER CONTENT

Rise of Iron included:

- 1 New PvP Mode
  Supremacy (6 vs 6)
- 4 New PvP maps
- 3 New Strikes
  3 player co-op
- 1 New Raid
  6 player co-op

RAIDING SOLO

What is a Destiny Raid?

- End game content
- 6 player co-op
- Lots of unique content

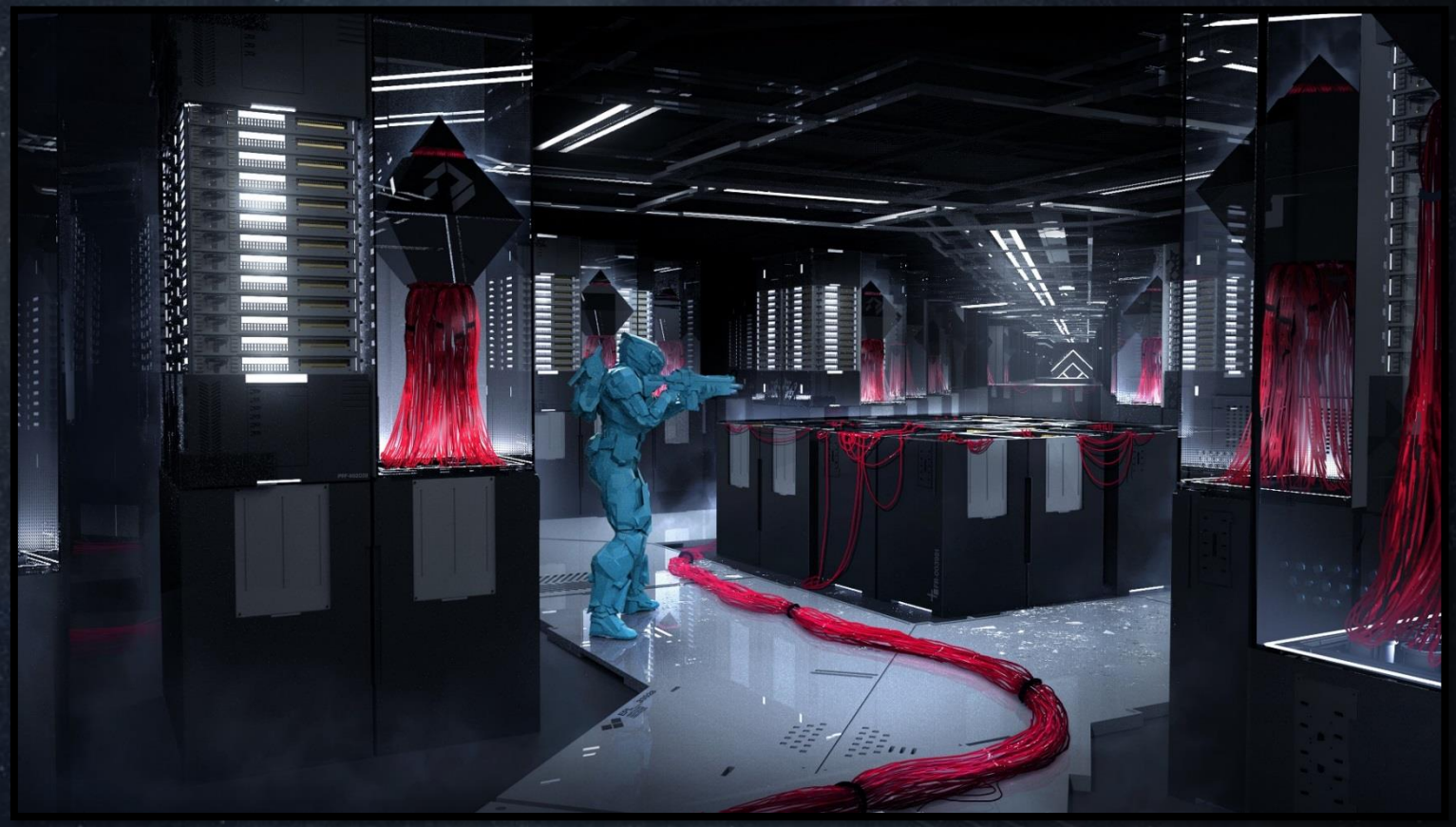
30
310
25
6
030

030
30
310
25
6

WORKFLOW CHANGE

Audio Mix Playtests:

- Practice sessions before mix
- Audio room connected to Playtest room
- Coordinated with dedicated QA teams
- Real gameplay



DESTINY IS BIG

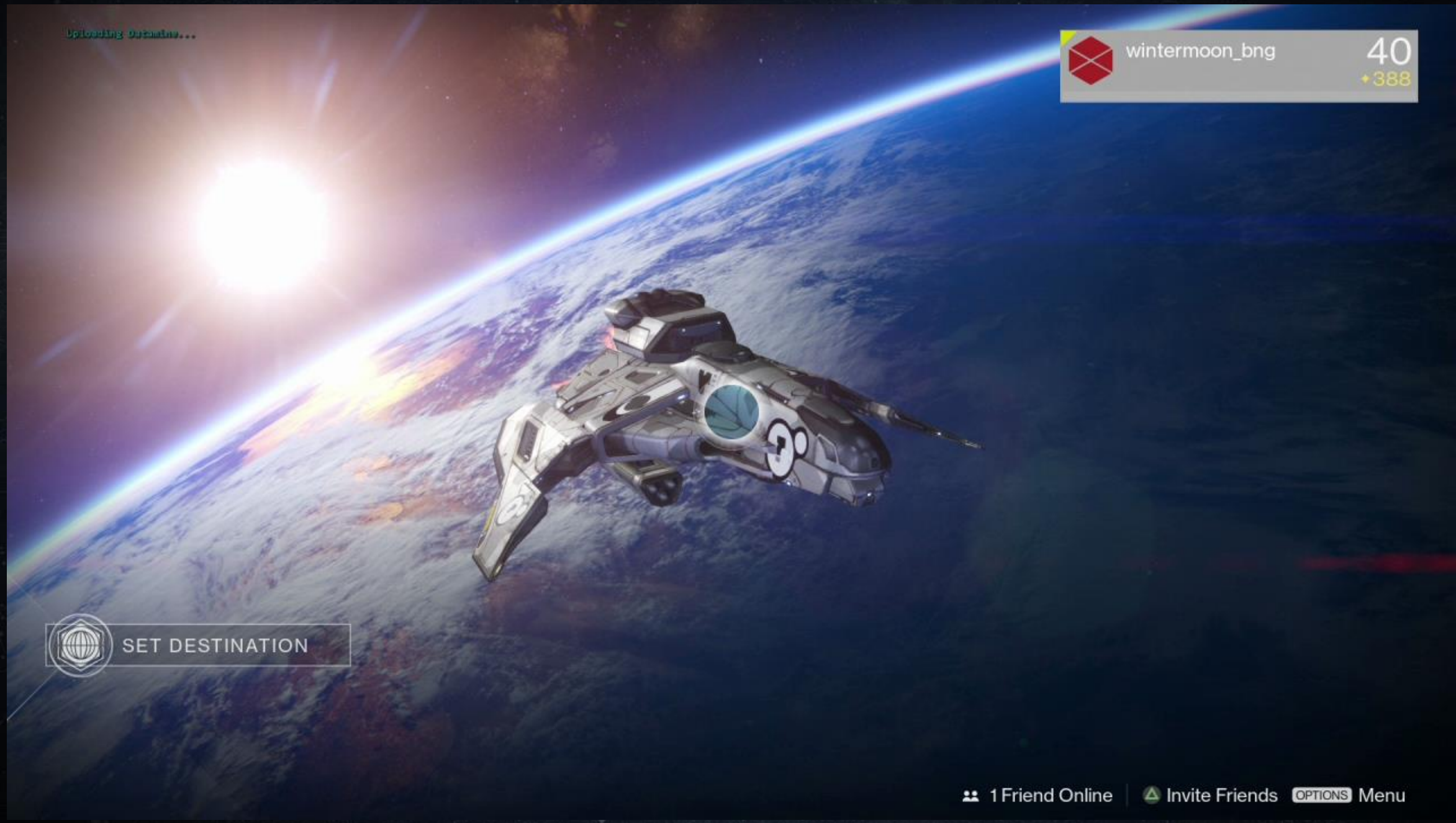
New content can unlock when you:

- Complete a mission
- Complete a quest
- Level up
- Pick up certain items
- Get enough players in your party
- Complete a puzzle
- Download an update
- Etc.

THE PAST...

Debug commands would be:

- Typed into Command Line in game (difficult on a console build)
- Accessed via a Debug Menu using controller shortcuts
  - Series of nested menus
  - Organized differently by branch
  - Lots of repetition



BUNGIE

DESTINY

BUNGIE TOOL: GUARDIAN

Guardian, our internal development tool:

- Runs on our PCs
- Connects to dev kits
- Functions include:
  - Build propping assistant
  - Command Console Input/Output
  - Screenshots
  - Virtual Controller
  - **Command Assistant!**

THE FUTURE...

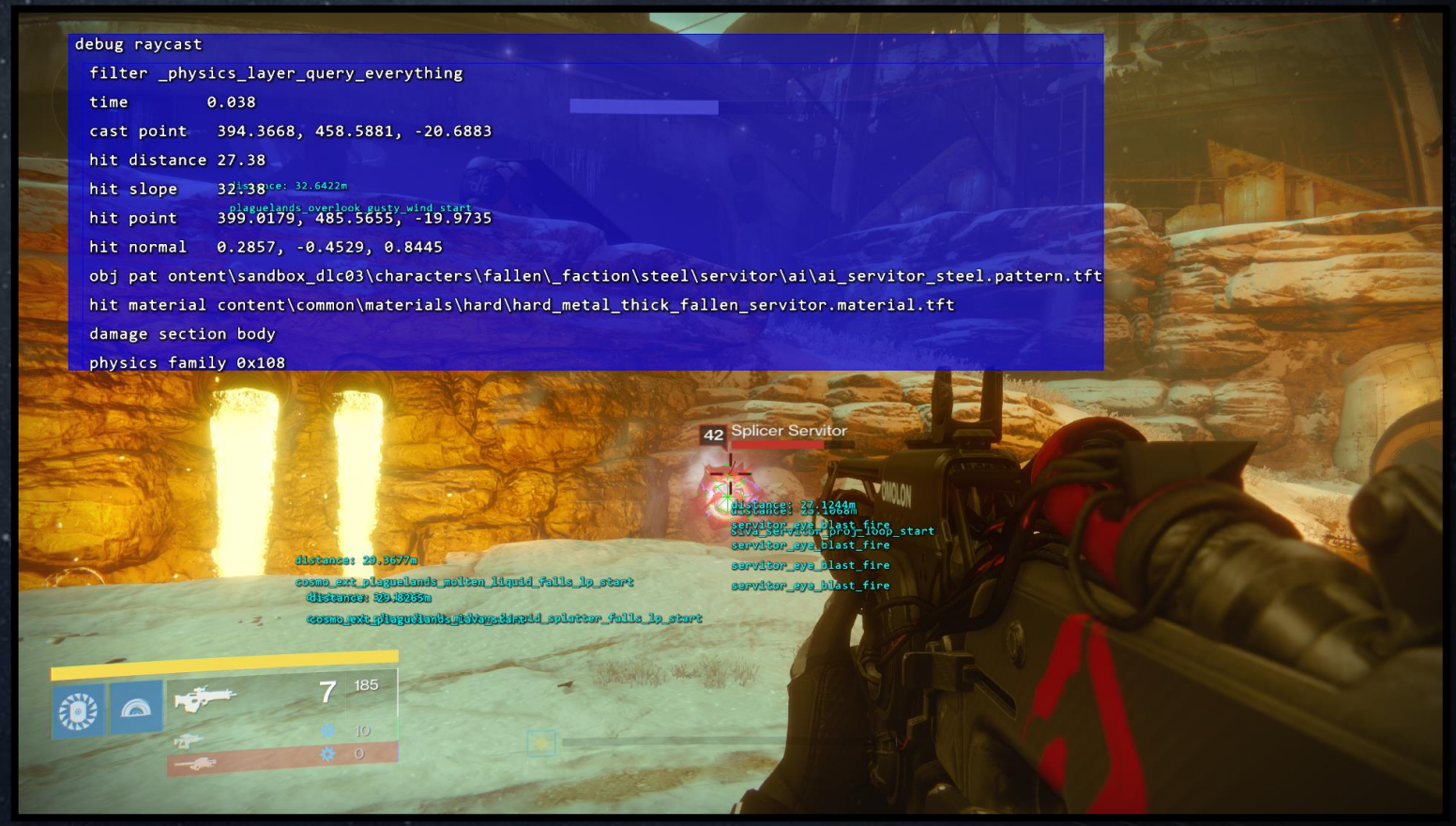
Guardian's Command Assistant allows for:

- Custom buttons that can group multiple debug commands
- Buttons with dropdowns or custom entries
- Easy to organize and color code
- Easy to share with the whole office

WHAT WE LIKE

Useful audio debug commands:

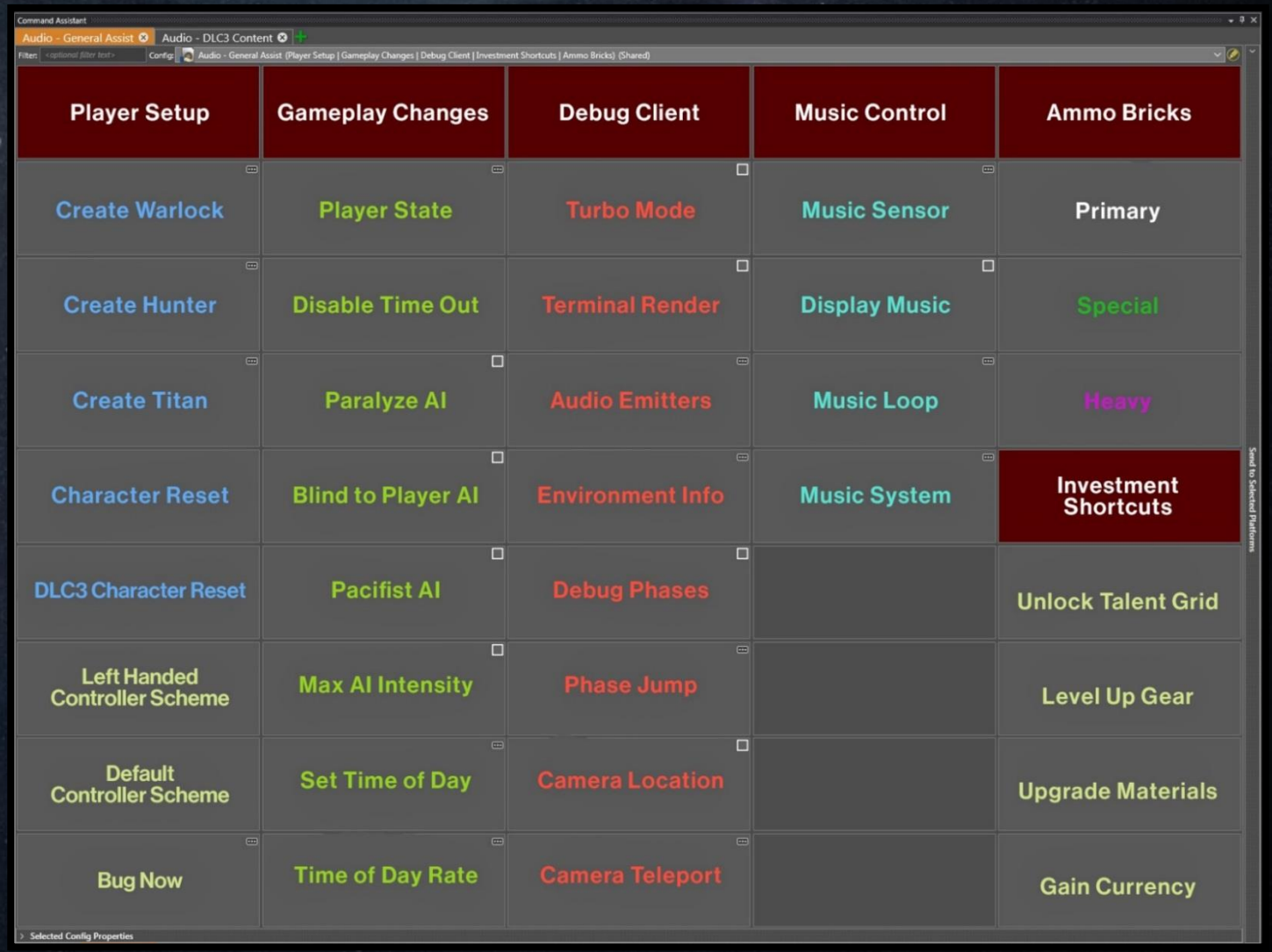
- Event Emitters
- Distance, Occlusion, Obstruction
- Environment Info
- Material Info
- Commands that let you wander around without actually playing



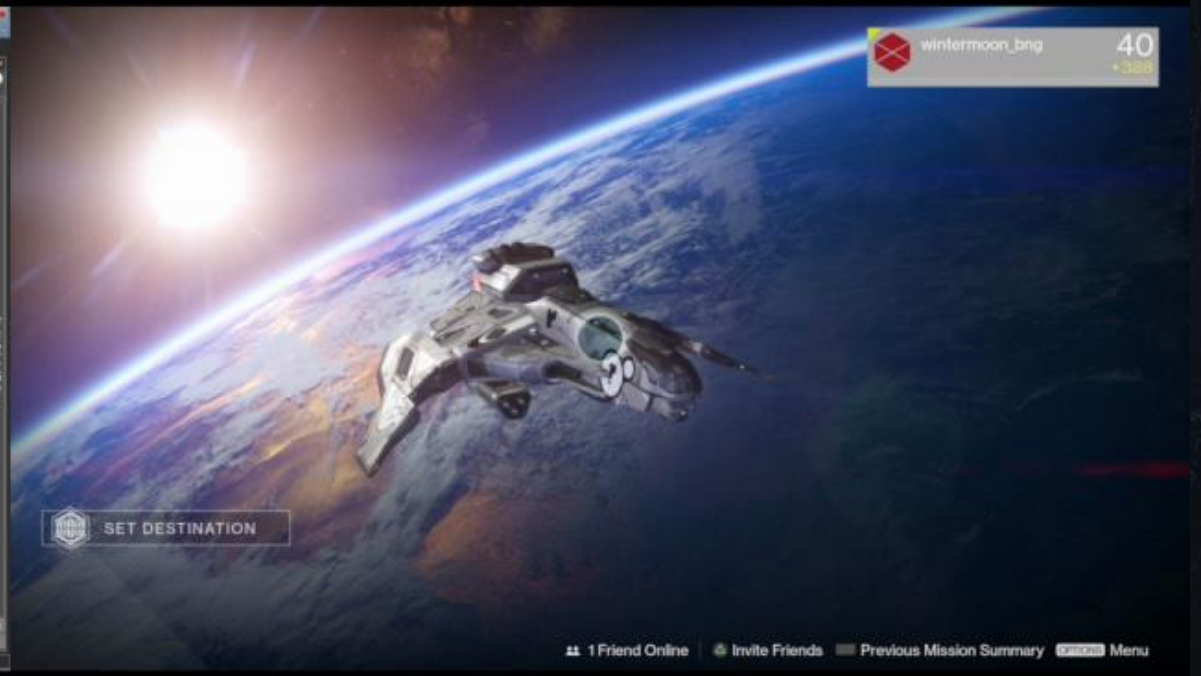
MAKING IT WORK

Using Guardian to improve Audio's Workflow:

- Created custom Command Assistants for the Audio team
- Function and layout based on Audio team's needs
- Priority was ease of use
- Verify and iterate
- Teach the team how it works
- Take requests and keep customizing



Story Activities
Strikes
Cosmodrome
Quests
PvP
Raids
Cinematics
New Weapons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SET DESTINATION
1 Friend Online
Invite Friends
Previous Mission Summary
Menu

THE RESULTS

With an Audio Command Assistant shared to all of Bungie:

- Audio QA efficiency improved
- Audio Team could navigate in Destiny much more easily
- Other teams could more easily investigate audio issues

THE LESSONS

The takeaways of this talk are:

- Audio teams need a lot of support to succeed
- Enable those around the audio team to help
- Replicate actual gameplay
- Great tools allow us to work smarter
- Making those tools intuitive is critical
- When there's time, look ahead

THANK YOU!

“Saved a shit-ton of time. Mix requires so much repetition, so avoiding complicated commands was awesome.”

– *David Henry (Audio Design Lead)*

“A thing of beauty. Greatly improved our efficiency for mixing and playtesting.”

– *Jay Weinland (Head of Audio)*

“Intuitive, easy to glance at and get to where you needed. It was so helpful at a point in development when everything was on fire.”

– *Kevin McMullan (Dialogue Director)*

“Guardian was a one stop shop for all the content. Daily set up was reduced to a few clicks and when flags were changed, buttons were updated right away.”

– *Evan Buehler (Senior Audio Designer)*

“Without the huge time savings these changes gave us in mix, we wouldn’t have been able to deliver our best-in-industry level audio. Period.”

– *Victor Hallock (Audio Producer)*

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