



SHADOWRUN

KILL CODE

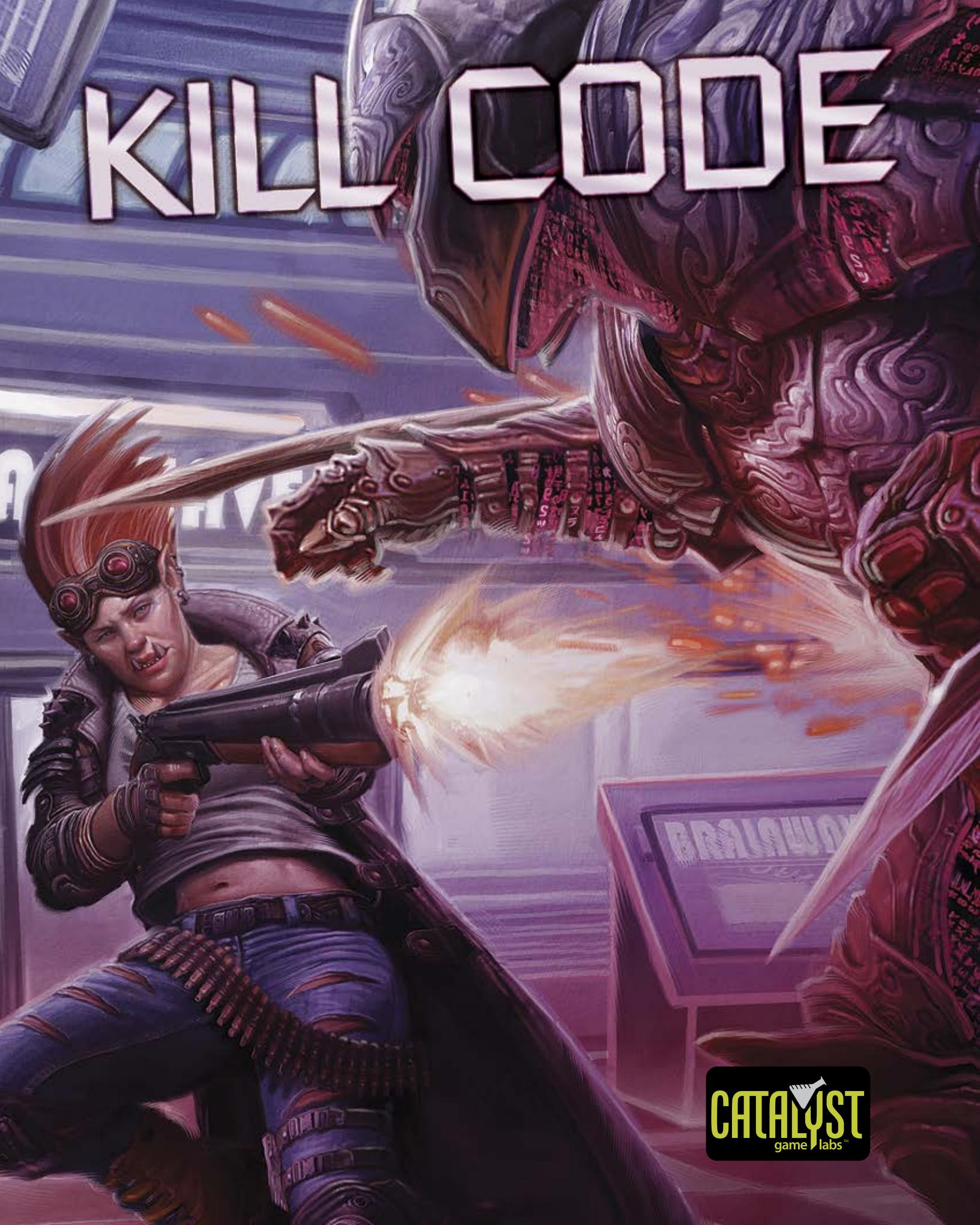
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ADVANCED MATRIX RULES

KILL CODE



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INTRODUCTION

The Matrix is not a place, but it is everywhere. It is stable and constantly in flux. It makes everything you do easier, which means gaining control over it keeps getting harder. For the vast majority of its history, humanity lived without it, but since it came into being, it has seemed essential for survival. So yeah, it's a mass of contradictions.

As vast and complicated as the Matrix can be, it follows the same rule as the rest of the Sixth World: You may not know everything, but if you want to survive, you should know more than your immediate opponent. *Kill Code* provides a range of information to give hackers a leg up on the competition, and to give non-hackers some intel on how the Matrix may be weaponized in their favor—or against them. It starts with **So You Want to Be a Hacker**, a useful guide to the workings of the Matrix and those who mess around with it. With lots of clearly labeled sidebars about discrete topics, it's a useful reference guide. Next is **Dips and Chips**, which will immediately lengthen the shopping lists of deckers, with all sorts of new toys they can purchase so they can ride the Matrix waves in just the way they like. **Disk Jockeys and Light-stream Riders** provides qualities and life modules connected to the Matrix, further individualizing hackers.

The next few chapters are all about technomancers. **Data Streams** introduces the concept of

streams for technomancers, new ways for them to channel Resonance into specialized and enhanced abilities. **In the Flow** is a wealth of options for technomancers—complex forms, qualities, echoes, and more to help make a technomancer character streamlined and unique. **A Million Icons Bloom** deals with the concept of virtual tribes, describing how they work and providing some examples of existing groups. **Diving Under** recognizes that if you're going to be on the Matrix, you might encounter technomancers as either friends or foes, so it's important to know how they operate—and how you might get the jump on them. **Infinite Realms** wanders to the wilder sides of the Resonance realms, looking into the unexplored and the unknown. It also dips into the Dissonance and some Dissonant streams that have been identified.

From there, the book continues on into the shadowy and chaotic parts of the Matrix. **Null Sign** provides more information about the mysterious Null first described in *Dark Terrors*. **Into the Wild** looks into wild hosts that do not seem to have direct ties to any group or individual deliberately building them, but exist nonetheless, full of secrets and dangers. Finally, **The Core of Consciousness** looks at technocritters, protosapients, and other beings that interact with and within the Matrix in strange, mysterious, and sometimes highly disruptive ways.

That's a whole lot of information about the Matrix's secrets—your job is to find out how to survive them when they hit you, and how to get someone to pay you for your fight.

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DOUBLE DECKER

It was an artist's touch, really. Some coder had taken pleasure in rendering a feature into the black IC as it came into full resolution: a headman's axe—notched, with the patina of dried blood and imperfect steel.

The suppression her sprite had laid down was just about to end, leaving the black IC to run active. Augur's persona lay limp in her lap. The two remaining security deckers and a host of IC prepared to bring down the wrath of GOD upon her head.

Andrea smiled a monster's smile. It was going to be a slaughter.

Andrea learned very early on that she was a monster. She was seven when they talked about virtua-kinetics. She was eight when they were called terrorists. At ten and a half, she saw the videos of children her age being vivisected. It was on all the newstrids. They'll wipe your data. They'll hack into your mind. They can kill you with a thought.

And they were right, mostly.

Unlike other monsters, she hadn't hid in the shadows. She had risen right in the middle of the bell curve. She excelled in being so utterly plain that a career in market research was natural. Because why not hide a needle in a haystack filled with other needles?

The Big Smoke was living up to its name on the morning she dropped into the National Gallery, an activity that sixty-three percent of the sprawl's population participated in at some

point of their lives. In spite of the fog, tasteful AR warned her of street boundaries and politely offered directions to other attractions. She'd considered taking pictures in Trafalgar square with the used commlink that she'd picked up when it beeped to tell her that "the taxi [which she hadn't ordered] had arrived." She closed the commlink, tucked it in her new clutch purse, and left it on the bench across from the fountains. Within an hour, it would be swiped by an opportune thief, leaving a data trail leading away from her.

Exiting the Westway, they pulled into an chop shop on the edge of Westbourne Greene. The taxi parked itself beside a two-story British icon. A smile snuck across her face as she stepped the London taxi to look at the twin-floored crimson bus.

"You disapprove?" said Augur, fading into the virtual beside her.

"Far from it Augur—I concur." She ran her hand along the vehicle, appreciating the machine as much as the strategy. "Spacious enough to house the necessary equipment. Ubiquitous enough to blend in. Rigger adapted, it provides us with mobility when the GODs come looking. It makes us virtually invisible."

"But only if you wear the hat," quipped the ork wearing a conductor's uniform from the rear entrance of the bus. His handshake was firm without being crushing. "Kefak ya helu, Shell. I am Moharik, but my friends call me Ibraheem. Come aboard."





BY TJ LACHLAN

While the downstairs was a perfect clone of any other bus, the upstairs was not. AR displays chimed: “Welcome aboard London public transit, chummer—stay calm and deck responsibly.” Seats had been taken out in favor of a reclining chair with restraints and what looked like the remains of a valkyrie pod in which Augur’s body rested, his smile a streak of ivory across his cream-coffee skin.

She’d barely had a training bra back when Augur and his team had extracted her from Evo. That had been years ago, leaving a debt she could never fully repay. He was older now; so was she. Shell rested her hands on the pod, feeling the complexity of the machine and the complexity of him. “Hello, Augur. What are you running? I see your usual kit, but what’s this?” She touched a module with autoinjectors.

“A way out. But before that, I have a gift that you may find useful.” He indicated a long garment bag that had been lying on the seat across from the Valkyrie unit. “Please, try it on.”

Moharik whistled as she opened the bag. “Lucky you. He only got me the hat.”

“Well, at least it’s an accurate analogue,” she said. The wrought-iron bars of the firewall pieced the virtual overcast above the NeoNET-Mayfair host. The muslin dress with puffy sleeves was a good period simulacrum of the host’s graphic protocols. Andrea—or Shell, we she as known on the streets—fought the urge to fidget with the Norwich shawl that fell across her shoulders,

secretly wishing she could adjust the Fresnel fabric catsuit that Augur had bought her. It moved across her body in ways that were uncomfortably “human.”

With it, however, she could see the variances in everything: the pixilation in every icon, the subtle waves of resonance, the virtual world reflected imperfectly in the “real.” Andrea could understand Moharik in a way that made her like him more as he doted on his drone while they sped around the London core. The digital stripped away to the core. Here, he was neither Arab nor ork. He was an entity of ones and zeros, and the data that streamed from him was unpolluted by the preconceptions and prejudices of a human world.

She could also see the subtle differences in the Augur of then and the Augur of now, and the code that was not precisely him. And she saw the core of him that was no longer there: the swagger and braggadocio that had been consumed.

Augur rapped the fence lightly with his cane, listening to the chime ringing like an old church bell. “It is formidable. But I am confident that together we can penetrate it. Are you prepared?” He straightened his top hat.

Nodding, she pinned a boutonniere to his lapel, tying the weave to his persona. Her hands rested against his chest as she fed resonance into him, boosting his cyberdeck beyond its performance specifications. Once, twice, three times he struck. He wedged his cane between the bars and levered it like a crowbar. The bars bowed, and the two of them slipped inside.



Lined with pictures of Various VPs and scientists rendered in early Victorian style, the gallery wall of NeoNET office was an exercise in tasteful aesthetics. Icons and personas ran past and around them like ghosts: meatworld people working late, their commlinks an active reflection of them in the Matrix. There were few drones on the property slaved to the security rigger's pod in the C&C room, mostly variants on the Ares Duelist armed with a payload of stun weapons and gas grenades.

Augur tapped the portrait of the head of research, and a backdoor in the architecture slid open. Virtual stairs led down, confirming Andrea's expectations about this data heist. They weren't heading into a lab; they were heading into a dungeon. Empty cell-workstations with iron bars and devices best left to the imagination supported a grim virtual motif.

While Shell dusted little webs of code that could lead back to their bodies, Augur searched. "Here," he said with confidence, facing a wall behind which there was nothing but a symmetrical datavoid. Nothing could be seen beyond it.

Seeing now that this was appropriate a dungeon as ever, she nodded grimly. "We can't crack an unconnected faraday cage from the host."

"You are correct. This is where we must rely on a like-minded individual."

The previous ten months at Mayfair had been hard on Melanie Cotton. She had the unique quality of being entirely unaugmented, which meant she was perfect for this role, but it also led to many lonely graveyard shifts and no social life.

When she'd been given a long weekend off a few months ago, she'd jumped at the chance to live a little. She'd hit the novacoke and the clubs hard, which is where she fell for his ivory smile and skin the color of lightly creamed coffee. The night had been a blur of bliss and whatever else they'd injected. Salacious screams had woken her neighbors—repeatedly.

In the morning, she watched his magnificent form as he slipped on his briefs. With an unabashedly wicked smile, she murmured languidly, "Mmmm, you were just what I needed."

"So were you," Augur smiled back. Melanie never even asked his name, but that didn't matter. She knew she would carry the memory of the night for the rest of her life.

The icon of Melanie's commlink stopped outside the faraday box as her meat body moved inside.

"We have approximately four minutes before access," Augur commented as Shell scrubbed as much of the traceable data from her as possible while they waited. She then moved to Augur, brushing the bits of code off him with an odd air of domesticity. "I need to know something. I need to know I can trust *you*." The last syllable emphasized with a note of finality. "I could trust Augustus Charles Ames, but there isn't enough of him left in there for me to make a substantive assessment. I need to know I can trust what you are."

Augur froze, in only the way a being of pure data could. "When did you discover that ..."

"... that you had overwritten him just like you'd overwritten this girl? A few months ago, his—your—behavior began to be inconsistent. It showed in our training. Augur taught me how

to hide; you were honing me into a weapon of specific design. For this."

"I have no intent ..."

"I know you have no intention of killing me," she said. "I need to know that I can count on you *not* to give in to human foolishness while we are doing this run. I need you to be cold. Logical. Calculating. Ruthless. I need you to be the kind monster you trained me to be. Can you do that?"

A light shone in through the darkness, cutting the answer short. A jacketed guard holding a lantern started to probe the alcoves: patrol IC, woefully timing for a routine inspection.

She popped her parasol and squeezed tightly against Augur underneath it. Resonance pattered like rain, drenching them in nonsense. Everywhere it touched, their forms faded to transparency.

This close to his code, she could feel the human left in him. The way he moved his arm around her as his configurator switched to maximize their encryption algorithms. There was nothing noble in the gesture, but her heart moved in a response that was seventy-five percent flight-or-flight, and twenty-five percent wildly inappropriate for this situation. Panicking, she quietly chanted to herself, "I am thought. I am not my body. My body is nothing but a shell. I am not the shell. I am not the shell. I am ..."

"Andrea. Andrea Schell. Schelly ...?" Her name. Augur's name for her. Not the Augur who'd taught her to fight, but the Augur who'd taught her to fear.

"Augur?" The tone was almost childlike. Weak.

"Your veil was adequate. We have not been discovered." She'd closed her eyes. Why'd she done that? She felt so foolish. Closing her eyes would not stop what was coming. The IC had not blinked or wavered. How she wished she could be free of that humanness. As the wall behind into the faraday lab fell away, Shell sought to find that cold certainty that she had known as a child that would enable her to be the monster she needed to be. Looking inside, she found it.

Being fashioned in tones of antiseptic white and grey didn't make the lab any less of a dungeon. She saw Monad consciousnesses, e-ghosts and AI pinned like butterflies as razors of data cut across their eyeballs. Code leaked from them like blood from still-living corpses.

Monsters. They were all monsters.

Spheres of rotating theorems manifested into existence beside her; expressions of how she defined her world: Regression, Deviation, Mean. The sprites followed behind her in train as she bent to mark the warden program. Databombs lay beneath each exam table connected to a firewalled hub. Each had to be individually disarmed. Too many—too many and not enough time.

As patrol IC glided back into the room, Shell knew there were more important things to focus on. It never had the chance to mark her as Augur spiked it from behind.

"Regression!" The lights flickered and equations blurred as the crack sprite suppressed the host's response. It bought them time from the IC, but not from the spiders that were already coming.



"Fraggit, what is going on down there?" griped the building's security rigger to the spiders. "I've got unregistered data entities running through the host. IC is compiling slower than drek"

"We've got a virtual intrusion on the advanced security labs BuildSec. Confirm at least one technomancer and his sprites, maybe more. Datasamples are being released. I repeat, samples are escaping!"

"That faraday lab has no connection to the host."

"Someone must have jury-rigged something."

"Shit. Logs only show that the server tech should be doing maintenance down there. She must have connected them," BuildSec confirmed. "I'm sending two squads."

"Don't pull the plug until we give you the green," yelled the decker. "You pull, and we're all dumpshocked to death."

"Affirmative," he responded.

Switching channels, he addressed the security team. "BuildSec to teams Bravo and Charlie. You are to secure the server room and immediately sever any cables you see leaving the faraday cage. Confirm?"

"Bravo Charlie confirms BuildSec. Over."

The deckers had their orders and he had his. His had included the words "at all costs."

Materializing one after the other, the spiders came in fast—five in total. The IC that followed rendered at a glacial pace, black boots falling into place pixel by pixel. Shell released one AI, a red ball of angry data with a view to a kill. Free of its restraints, it surged toward the nearest persona like a rabid dog. And like a dog, it was put down without thought or mercy. But it gave time for her fault sprite and Augur to drive two spikes deep into the first decker's persona.

A data spike struck Augur squarely in the chest, his boutonniere exploding in a shower of petals. Unfazed, he stuck back, splitting his attack and driving code into two others. All the while the IC continued to grow, rendered now up to their waists.

She worked furiously, throwing marks on everything, deckers and devices alike. Locks popped, and disembodied forms struggled, shambled, or flew from their shackles and through the physical bridge to the host. Few were in any condition to fight; none had the energy. Some would make it out. But that physical bridge was their weakness—burned, they would be dumped, and this would all be for naught.

The meat was coming. Shell saw the bounce of their icons as they moved in the physical. She pulled sprites away from Augur's defense, leaving it to a death sentence. "Deviation—ataxia protocol. Mean—assist!"

With abandon, the machine sprite began to wreak merry havoc with the host, with blaring alarms, locking elevators and pressure doors, engaging fire suppression systems, and alerting emergency services. Threading the resonance, Shell weaved out a hand to reach for the overwhelmed rigger. Seizing control, she issued a quick command before bricking the rig.

She felt her sprites dying as she materialized back in the faraday lab, hands still twitching from the fade and effort. Databombs had exploded. Noise was everywhere.

Augur's persona lay limp on the floor, dead or nearly so from biofeedback. Pulling him close to her, she reached into his code, hoping the Coriolis form could send enough of the

Monad back to their bus. As she held the weave, she looked up, seeing the three remaining deckers and the IC that had finally compiled.

She smiled a monster's smile.

The headman's axe came down and split the NeoNET spider's body from collar to sternum. Again there was pandemonium. IC tore into spiders and devices alike, misreading any marks the spiders hadn't bothered to clean off. Spiders screamed, and meat died. "BuildSec, what is going on up there? BuildSec!" Tarred and link-locked, spiders were suddenly trapped in a fight against their own tools. "Reboot! Reboot! We've got to get out of here."

Shell looked at him. "Don't hold your breath."

The decker looked at her, puzzled, before he began a very real and physical cough. He stumbled to the floor from non-lethal countermeasures in NeoNET's drones that Shell had deployed in their control room.

"I meant that literally."

"How are we doing, Moharik?!" she yelled as she logged back into the real world, resetting her persona and clearing any marks.

"Mashalla woman! I thought you were going to be quiet. All of London is rushing to see what you have done." It was true. London Fire, Medical, and Police were all responding to the alert from the Mayfair branch; GridGuide said that traffic was snarled in a two-kilometer radius around the tower. She smiled at the live newsfeed of NeoNET HTR vehicles trying to circumvent a firetruck, two ambulances, and a crowd of rubber-neckers. "How is Augur?"

She laid her hand against his metal coffin, hoping that she'd been able to save enough of him. There was something in there, still processing, perhaps enough to—wait. There was a mark on his data "Shit! We've been tagged."

She followed the icon back to its source, a black SUV with flashing yellow lights for whom traffic was pulling aside. It wasn't running silent. GOD did not run silent. "They have our location and speed. They don't have our vehicle," she said, scrubbing the mark from Augur's meat-corpses.

"What do you advise Shell?"

"Drive normally. I've got this."

Cars whipped through her digital body as Shell stepped out of the bus. An armored SUV bore down on her with murderous intent, but she felt no touch of fear.

How could she when they had left her with so many weapons? Cars and lorries whose operators had slaved them to GridGuide. Dozens of drones moving on pitiful dog-brains Reaching deep, she grabbed the traffic signal and held it as it burned red. Held it as traffic progressed. Held it as people crossed. Held it as override codes burned her fingers. Held it as brakes squealed. Held it as people screamed. Held it as metal deformed and meat was sheered from flesh.

Andrea held it and watched with cold eyes. All her focus was on saving the life of a dead man.

SO YOU WANT TO BE A HACKER

MATRIX 101

DRACONIC NETWORKING

POSTED BY: SLAMM-O!

"All the Matrix is a stage, and all the deckers, technomancers, agents, sprites, and AI merely players."

-Unknown decker

- You're all gonna get a kick out of this. Last year on March 7, a new dragon awakened and revealed itself in New Orleans. Well, not technically *in* New Orleans, but in the swamp surrounding the Crescent City. This dragon, an adult sea dragon by some reports, has named itself Terasca, and it wasted no time in demanding the locals bow and pay homage. It didn't take long for Perianwyr, who happened to be in New Orleans for Mardi Gras, to talk the new dragon down and explain the way of the world. Since then, Terasca has stayed a bit out of sight, although it purchased a local plantation and has hired a small army of employees to do Ghost-knobs-what. I couldn't help myself from snooping around in the plantation's host, and you'll never guess what I stumbled on. Terasca's patience with underlings seems to be lacking, so while attempting to explain the Matrix to the new dragon, one of the dragon's flunkies got whacked for questioning why Terasca wasn't picking the concepts up quicker. After they scraped his remains off the ceiling, a certain Jolene Price (who narrates the piece below) was put in charge of explaining the Matrix to the dragon. The following is Jolene's side of that meeting. Obviously, we can't hear what the dragon is saying because it's communicating telepathically. What follows is a Matrix-for-dummies (or dragons) that is quite well-informed, with some knowledge that is more widespread in the shadows than in the real world. There are also hints of what we might expect from this swamp dragon. Enjoy reading and offering commentary.
- Slamm-O!
- I knew this one. Take caution dealing with this New Orleans dragon.
- Orange Queen

THE PRECURSORS OF OUR CURRENT MATRIX

Powerful Terasca, my understanding is you wish these briefs to be limited to only the most necessary details, so permit me to begin straightforward. The Matrix began in earnest when, in the 1990s, something called the internet took over two-way telecommunications. Prior to the internet, telephones (voices converted to electrical signals and transmitted through wires [example shown]) were the dominant form of information exchange over long distances.

Computers—complex calculating machines powered by electricity—were first operated by punching patterns of holes in paper cards, later by entering complex codes using keyboards, forearm-length devices with alphanumeric keys. Computers became popularized when two corporations, Apple and IBM, adopted a graphic user interface to aid navigation and use. Humans began using a haptic device called a mouse, along with the a keyboard, for nearly unlimited applications while the computers interpreted complex numbers and codes, and then displayed them on screens as easy-to-understand pictures and icons.

In time, nearly all computers worldwide began to connect and network together, and the worldwide internet was born. By 2007, over ninety-seven percent of long-distance communications were handled this way. With nearly unlimited information being transmitted instantaneously, individuals called hackers grew in influence. Hackers exposed and exploited security flaws in the internet for their own purposes. Destructive coding known as computer viruses, used to attack computers' code, spread as a tool among hacker communities. As the internet grew, so did the malignancy and impact of these viruses.

In Chicago in 2018, ESP Systems' **Dr. Hosato Hikita** created the first generation of Artificial





Sensory Induction System Technology, or **ASIST**, also known as **simsense**. This technology was able to induce artificial sensations directly from electronics into metahuman brains. Of course, these sensations were crude, but they would not stay at that level for long.

- What she doesn't mention is Hikita used the research of Dr. Ronald Thomas Halberstam, a colleague of Hikita's at ESP, to complete his own work. Halberstam was mapping the human brain's thought processes, trying to create AI.
- Icarus

In the 2020s, building off Hikita's work, Sony Cybersystems, Fuchi Industrial Electronics, and RCA-Unisys each developed prototype **cyberterminals**, room-sized devices allowing users to **jack in**, or directly interface their central nervous systems with the world data network, using a cybernetic implant called a **datajack**. Seeing an opportunity to gain an edge in the escalating cyber-warfare game, the United States government created a special cyber-security task force called **Echo Mirage**. These cyber-commandos were given the latest cyberterminal technology, but what they actually were created to accomplish remains vague.

- Those early cyberterminals inflicted major psychological stress on the early Echo Mirage team. That's why the U.S. government developed a regimen of drugs and computer programs, called Psychotrope, to help condition their minds.
- Glitch

Computer viruses continued to pose ever greater danger to the world's economy and information network, but nothing prepared the world for the Crash Virus of 2029. On February 8, 2029, computer systems worldwide were attacked by a virus of unknown origin and unprecedented power. It crashed systems, wiped data, and destroyed

hardware around the globe. Within months, the virus collapsed the world's data network. The results were devastating: governments fell, corporations were destroyed, and the world's economy was on the brink of collapse. At the onset of the Crash, the US government mobilized Echo Mirage to stop the chaos. Using the still-experimental cyberterminals, Echo Mirage fought the Crash Virus on the internet, experiencing, through simsense, the electronic battle of warring code as if it were real; they felt pain when attacked, and when defeated in the cyber-realm, their bodies shut down. Nearly all members of that first Echo Mirage team were killed in this manner.

- This is pretty good, but there's a lot of missing info here. For the sake of posterity, let's set the record straight. The Crash started with a corp called Acquisition Technologies. AT was owned by Thomas Roxborough, and it employed Lucien Cross and retired USAF Major David Gavilan and, both of whom would go on to greater things. Roxborough had his sights set on taking over rival company Gossamer Threads, owned in part by the great dragon Dunkelzahn. Never one to shy away from malfeasance, Roxy ordered his hackers and programmers, including Gavilan, to create a virus designed to destroy Gossamer Threads' network. Roxy tested his virus on a company called Effexx Studios, and after it was successful in destroying Effexx, it destroyed the internet.
- Bull

Desperate, the U.S. government recruited another group of specialists for Echo Mirage, this time including artists, programmers, even IRS agents and other out-of-the-box thinkers. After training, this new group was armed with a new generation of cyberterminals small enough to fit on desks and sent into the internet to combat the virus. After only eighteen minutes, four of them were dead, casualties of the virus' deadly biofeedback attacks. As they battled the virus over the next few months, this new Echo Mirage slowly and painfully gained





the experience needed to finally make headway toward destroying it. Corporate and military observers were unified in their concern about the capabilities that Echo Mirage possessed. They watched in horror as the team easily bypassed network security, noting no current internet security measures stood a chance against a hacker armed with a cyberterminal. It took a full two years for the team to defeat it, but in 2031, the virus was wiped out. Only seven of the thirty-two members of Echo Mirage lived to see the virus destroyed. Four of these survivors took the secrets of cyberterminal technology and moved into the private sector.

- As the Crash cascaded through the world's networks, Dunkelzahn convinced Gavilan to join Gossamer Threads. When Big D learned Gavilan helped create the virus, he urged him to join Echo Mirage to redeem himself. Also, in the time between the deaths of the first team and the next thirty-two, Echo Mirage discovered how to weaponize Psychotrope and use it as an anti-virus against the Crash Virus.
- Bull
- Enter: AI. At some point during the Crash Virus conflict, the Psychotrope anti-virus' incredibly complex programming was sparked to consciousness through its intimate connections to the Echo Mirage team. Once the Crash Virus was allegedly destroyed, Psychotrope's code was decommissioned, and it lay dormant in an old military server for years until the hardware was purchased by Fuchi.
- The Smiling Bandit
- So who were the seven survivors of Echo Mirage? Always wondered.
- Borderline
- Everyone has. But nailing down the seven has proven tricky. Gavilan survived and founded Gavilan Ventures. Gavilan himself disappeared around '32, though.
- Mr. Bonds
- Ken Roper and Michael Eld survived and founded a corp called Matrix Systems.
- OrkCEO
- A PI named Dirk Montgomery suggested a dwarf woman known as "Buddy," who was a researcher at the University of Washington, survived Echo Mirage and had some serious emotional challenges as a result. Regardless, she became a wiz decker, but died in '52 when she was fried by Yamatetsu black IC.
- Butch



- Almost thirty years ago, an upload on the Shadowland BBS outed Keith "The Suit" Hannigan and Erica Rutledge as two more. And then there's Alice, but she doesn't count.
- Hexatite
- Rutledge was one of the world's first shadowrunners. She went by the name Static. She confirmed Buddy and Hannigan as Echo Mirage colleagues.
- The Smiling Bandit
- Okay, blokes, I'll bite. Who's Alice?
- Chainmaker
- Alice Haeffner. "Late" wife of UCAS President Kyle Haeffner. She was killed fighting the Crash Virus, or so it was thought. Her body was revived and kept in a coma, but her consciousness was separated from her body by the Crash Virus. Rumor was she continued to exist in the Matrix as an e-ghost, dwelling in some creepy virtual Matrix space called Wonderland.
- Bull
- Listen, Bull. You've been making some pretty fraggin' far-out accusations. First, Thomas Roxborough may be my ex-husband and I may hate him, but this is the second time you've suggested he was responsible for the Crash. And a lot of the info-dropping here is stuff no one's ever confirmed. Are you going to cite sources this time?
- KAM
- I guess so. Can't really hurt anything now. Icarus doesn't make a habit of giving away info, but lots of this comes from him. He's forgotten more about the Matrix than most of us know. Pay him enough, and he'll tell you all sorts of secrets. The rest is mostly from FastJack. Before he left JackPoint due to his condition, he slotted me a huge file with everything from theories on Saeletra to real names and locations of old Shadowland posters; stuff corps would level mountains for. That's why I don't share it. But the above is ancient history by now.
- Bull
- I do like cred. Yeah, I got the chip truth on Halberstam, Alice, and Echo Mirage. But it ain't free.
- Icarus
- Nobody's heard from Alice in a while ... also, she doesn't count as surviving. So that's only six. You forgot Johnny Clean.
- Plan 9
- Oh, after fifty years, you've finally found the answer? Way to go! Did the unholy offspring of a Resonance-infused monad and the e-ghost of Dunkelzahn tell you this?
- Snopes
- Nope. I met someone who was pretty sure they heard him talking about it in Hong Kong. Or was it Berlin? No, Seattle!
- Plan 9
- I ran with a pretty wiz decker for a few months back in '71 who swore one of the survivors was their dad.
- Hard Exit
- Yeah, I've heard that a few times myself from a few newb deckers trying to score an in to the biz. Bottom line is, you all don't know for sure who the survivors were, do you?
- Borderline
- No.
- KAM
- Not really.
- Bull
- It's hard to be sure.
- Snopes
- Nope.
- The Smiling Bandit

Second-generation cyberterminals began to gain popularity following the defeat of the Crash Virus. In 2032, the Corporate Court spearheaded a plan to rebuild the worldwide information network that was shattered by the Crash Virus. Using immersive virtual-reality technologies, this new network incorporated a three-dimensional graphic user interface, much like the old internet used a two-dimensional interface. The network was fully compatible with emerging cyberterminal technology, and it became known as the **Matrix**. Matrix-friendly, third-generation cyberterminals, fitting easily on desktops, became available to consumers in 2036. Just a few years later, Fuchi Incorporated hosted the Universal Matrix Specifications Conference, meeting for three months to determine a set of standards for Matrix programming.

By 2050, cyberterminals were available as small as keyboards and were dubbed **cyberdecks**. The portability of these cyberterminals posed security issues for corporations. To the corporations,



their networks were castles, so they created **intrusion countermeasures**, or **IC**, to serve as tireless online sentries. Deadly versions of these countermeasures, **black IC**, were based on the lethal bio-feedback used in the Crash Virus. While not *always* deadly, IC became the corps' primary deterrent to keep cyberdeck users, called **deckers**, out of their networks.

- Matrix Systems, founded by former Echo Mirage alums Ken Roper and Michael Eld, created the first portable cyberdeck called the Portal. Sadly, all that research was lost just before both died in "accidents." Matrix Systems was bought out by Richard Villiers at Fuchi, and the cyberdeck technology magically appeared again, released as the first Fuchi cyberdeck.
- OrkCEO

The 2050s were a decade of ongoing change and discovery for the Matrix and those who accessed it. First, rumors of Ultraviolet hosts persisted. **Hosts** are virtual places on the Matrix, and Ultraviolet hosts were so lifelike that when someone experienced them in virtual reality, it was impossible to tell cyberspace from reality, causing many to go insane. However, the amount of processing power required to maintain these hosts was prohibitive for all but the most dedicated of corporations. The ability to turn off safety measures while on the Matrix also became a problem in many ways. The Matrix protocols dictated that certain bottlenecks be put in place to protect the metahuman mind from experiencing the 3D nature of the Matrix too vividly. Deckers found ways to turn these safety measures off, however, by using "hot simsense" and allowing them to move, think, and experience the Matrix on a much more intense level. In exchange for putting their mind in more peril through "**hot sim**," they found their ability to combat IC and navigate the Matrix was enhanced as well.

Even more nefarious activities continued to emerge as the Matrix developed. Halberstam's babies for example. In 2052, Dr. Ronald Halberstam, previously of ESP, was found to be isolating the brains of children from their bodies and raising them completely in the virtual world of the Matrix. Also during the 2050s, the first true artificial intelligences (**AI**) were created. Or born. Depends on who you talk to. Anyway, AI exist without any physical bodies as self-aware and intelligent entities, dwelling only in the electronic worlds of corporate network hosts or the Matrix itself. Children

called **Otaku** appeared, who could access the Matrix without a cyberdeck, using only datajacks linked to their brains.

Soon, corporations began working on the next steps for the worldwide Matrix. More than a few tech-based corporations began making plans to implement a wireless Matrix that would be able to integrate the world's devices without the need for physical connections. In time, the Corporate Court gathered Matrix security personnel from each AAA megacorp and founded the **Grid Overwatch Division**, typically referred to as **GOD**, tasked with executing law enforcement for this confederation of corporate fiefdoms.

In 2058, the AAA corporation Renraku Computer Systems successfully captured an AI named Morgan. Renraku went on to slice up and utilize parts of her code to autonomously run their Seattle Arcology, which housed more than 90,000 people. This new program gained its own form of autonomy and began calling itself Deus. In 2059, Deus took control of the Renraku Arcology and closed it off from the outside world. Eventually, Deus was defeated, and the Arcology shutdown was lifted. The legacy of Deus did not end there, however. In the early years of the 2060s, former servants of Deus formed a strange alliance with a doomsday cult known as Winternight. This partnership culminated in a worldwide attack on November 2, 2064, aimed to destroy the world in its current form. While much of the physical damage was contained worldwide, the damage to the Matrix, called Crash 2.0, left the worldwide network in ruins. Early in 2065, the Second Universal Matrix Conference introduced the wireless Matrix, which became the new standard.

It was not long after this that the world was introduced to **technomancers**, or virtuakinetic metahumans, who could access the wireless Matrix with only their brains, not unlike the earlier Otaku, but without their wired connection. In some ways, they are like dual-natured creatures. Technomancers view the world in augmented reality by default, with Matrix data overlaying their vision similar to the way the Awakened perceive astrally.

WHAT IS THE MATRIX?

On January 1, 2075, the current version of the Matrix was revealed. Danielle de la Mar, notorious hacker adversary, proposed structures and



protocols for a new Matrix, and she served an advisory role throughout its development, making sure it adhered to the definitions of safety she had set forth in many public discourses. The following is a description of what this new Matrix is, in as concise a fashion as I can make it, wise Terasca.

- Poor Jolene sounds terrified. "Powerful Terasca," "wise Terasca," does this dragon have an inferiority complex or something?
- Borderline
- Well, we don't really know much about Terasca, but they don't seem to be a great dragon, only an adult. Jolene is most definitely afraid, given what happened to her predecessor. But trust me, she's being extremely well taken care of for doing the work and peppering her words with draconic flattery.
- Slamm-0!

At its most basic, the Matrix is the network formed by every wired and wireless device on the planet. This network draws computing power from all of these devices and is thus capable of processing nearly unlimited amounts of data almost instantaneously. The connected nature of the Matrix allows users to read messages, pay bills, and communicate over any distance. It monitors individuals' finances as well as the larger economy. It handles utilities, manages traffic on city streets, helps guns shoot more accurately, gives medkits access to medical records, and even detects wear and tear on clothing. It dominates nearly every facet of everyday life, no matter who you are.

But this is only the surface. Just as magic can affect everyday life but is a different experience from entering the astral realm, entering the Matrix itself through virtual reality is entirely different from using a Matrix-connected device. Entering the Matrix plunges you into a virtual universe, a shared consensual hallucination with every other entity inside. Everything is rendered in incredible detail powered by a century of digital graphics innovation. Most of the time, users can tell the difference between the Matrix world and the real one, but not always—such is the sophistication of the experience. It may be helpful to think of the Matrix as a great ocean planet. The Matrix proper is the water that defines the world. It touches everything and connects the world together. It is the medium through which we move from one place

to another. Users can fly, walk, or even swim within it, travelling at nearly unlimited speed. While inside, all interactions will be with **icons**, 3D digital representations of the persons (personas), places (hosts), and things (files and devices) of the Matrix. Persons in the Matrix take a virtual form called a **persona**. It is a person's digital representation, much in the same way that dual-natured creatures have a physical and astral forms. A user's persona is tied inextricably to their brainwave patterns and global metadata, so they are virtually impossible to counterfeit, but more on that later. All around you are the personas of other Matrix users. These could be physical users of devices like legitimate users or illegitimate deckers, the **living personas** of technomancers, semi-autonomous servants called **sprites** or **agents** created by other users, or even AI. Due to the protocols which govern the Matrix, personas can be customized, but they can only appear as metahuman-sized objects, ranging in size between a dwarf and a troll.

Floating alongside personas in the Matrix are **devices**. Any real-world devices connected to the Matrix, which in 2080 is nearly all of them, also appear as icons. Regardless of their actual physical size, devices in the Matrix almost always appear smaller than personas.

Looming large over the vast ocean of the Matrix are islands called **hosts**. In the Matrix, hosts hover far above everything else. Just like climbing out of the water onto land, climbing out of the true Matrix into a host is a transition. Inside hosts, physics are experienced however they are programmed to behave. Most mimic real-world physics for the sake of ease of use, but this is not always the case.

A host, sometimes inaccurately called a node due to old habits, is the "where" of the Matrix. Matrix protocols are very specific as to the definition of what a host is, and yet there are Matrix places called "hosts" that do not quite conform to these Matrix protocols or definitions.

- This new Matrix tried to completely replace device-based hosts with virtual hosts, which have no physical counterpart. The exceptions are outdated hosts that existed prior to 2075 and rogue hosts; they still appear as hosts in the Matrix, despite the Grid Overwatch Division's strict definitions.
- Orbital DK
- True. When the term was first coined, a host was the illusion of a 3D place within any network. Paranoid corps



and abandoned networks may still have offline “hosts.” So while GOD says a host isn’t a host unless it is connected to the Foundation of the Matrix, offline and non-compliant hosts still exist.

- Bull

Besides devices, there are other icons that can be interacted with on the Matrix, known as **files**. Files can be as simple as raw **data** like electronic mail or accounting details, but they may also be as sophisticated as **programs** that perform incredibly complex functions.

The previously mentioned Grid Overwatch Division, or GOD, rules the Matrix ocean from far above it. GOD has physical servers located on a satellite orbiting the Earth, and in the Matrix, they are unseen, and keep watch far above even the hosts, only making their presence known when necessary to wield their power against a rule-breaker.

Yes, great one—they are very much like dragons flying high over their domains.

If GOD watches far above the Matrix sea, the **Foundation** is what exists below it. Most users do not know this Foundation exists, let alone know what it is. Access to the Foundation is no small feat. Pushing our ocean metaphor, the Foundation is the ground on which the ocean of the Matrix lies and the stuff of which hosts are made. Hosts are connected to the Foundation via a “foundation” particular to that host. In this way, hosts are a bit like continents. Accessing a host’s foundation is perilous to say the least, even for members of GOD, who are given hazard pay even to perform the most routine maintenance there. This information is not common knowledge, however. Most corporations desire the populace to believe GOD is in complete control over the Matrix and is able to control it. This belief is dubious.

- She’s right. What we’ve learned about the Foundation these last few years certainly dispels any notion that GOD controls it. They may have got the ball rolling, but it is definitely beyond their control. In fact, I don’t think anyone has control of it anymore. I’ve come to believe that even if all the devices in the world were shut down simultaneously, the Matrix would continue to exist.
- /dev/grrl
- Bulldrek. That doesn’t make any sense. Something can’t be one hundred percent virtual without a physical component. That isn’t how physics work. Go drunk, /dev/, you’re home.
- Clockwork

- I’ve come to believe the same, actually. It is a bit unsettling, but it appears the Foundation of the Matrix is far more than we thought it was. When the new Matrix first hit, no one knew about the Foundation. I believe GOD didn’t even really know about it. What I mean is, of course they knew how to use it to build hosts, but they didn’t know how it worked or how “foundational” to the new Matrix it really was. All they knew is that Danielle de la Mar and her team created something special, it worked, and it was very good at protecting corporate assets. They were willing to look past anything else. It wasn’t until their technicians started dying during routine jobs that they began to ask questions, and by the time they did, it was too late to do a damn thing about it.

- Netcat

- The truth is much darker and much more dangerous as well. Danielle de la Mar’s hatred of technomancers is well known. What isn’t public knowledge is that back in the early 2070s, de la Mar rubbed shoulders with anyone she could find who was doing experiments on us. When she was given the contract to oversee the creation of the new Matrix, she had her fingers in more than just the protocol pie. The corporations used double talk and technobabble to explain how the new Matrix was going to be hardware-free and completely virtual, but the physics just don’t work out. But de la Mar made it happen. She took what she learned from the experiments and used that to torture and forcibly network a gestalt of over one hundred technomancers, which she used as the “foundation” for her virtual Matrix. The building blocks she used to create hosts and data trails were the souls being sucked out of those hundred. When she presented a proof of concept to GOD and the rest of the Corporate Court, they were impressed and all pretended like they understood it, so as not to admit a virtual nobody like de la Mar was sharing knowledge that was beyond them.

- Puck

- Drek. Those are potentially damning charges. You’re saying that every time we use the Matrix, we are mind-fraggering a hundred technos somewhere? That doesn’t sit well with me.

- Bull

- I bet it sits just fine with Clockwork. That drek-hole is probably getting off now at the thought that using the Matrix hurts technomancers.

- Slamm-0!

- Wrong. The idea of the Matrix being built on actual technomancer mind patterns means I don’t want to be swimming in the Matrix if the whole thing is a demi-



human's cybernetic sheep dream. Who knows what those vengeful gods will eventually unleash?

- Clockwork
- Well, fortunately or unfortunately, you don't have to worry about that. It's been years since de la Mar intended to start unplugging the One Hundred to see if the new Matrix would work without them. Instead, she discovered that all the technomancers who acted as the foundation for her beloved Matrix were dead. You're probably asking yourself how the Matrix is still functioning, then. Follow me. You know how Resonance and Dissonance wells have been popping up, seemingly at random, throughout the Matrix for years now?
- Puck
- Puck, you can't be suggesting what I think you are.
- Netcat
- I can't help but notice Jolene doesn't mention Resonance, Dissonance, or Resonance realms to Terasca.
- Bull
- Probably because suggesting the idea that there are sources of information and power that dragons have no way to access is likely to get Ms. Price eaten.
- Glitch
- Back on topic: The source of the Resonance and Dissonance wells was the One Hundred. Their connection to the Resonance established a permanent link to the Resonance realms, permeating the Foundation. Once established, the link provided unlimited processing and storage power for the Foundation, and thus, the Matrix. In return, all data from the Matrix bled through into the Resonance realms. When the technos died, whether they had a hand in their own demise or not, the foundation persisted, and it is now a hybrid space between the sum of all metahuman digital data, the Resonance realms, and Dissonance realms as well. No one controls it, although GOD is still able to manipulate the top layers.
- Puck
- I'm gonna need some time to process all of that.
- /dev/grl
- Likewise.
- Netcat
- Me too.
- Bull
- Me three.
- Slamm-o!

The Matrix depths can only be accessed through **grids**. Grids, to conclude our nautical metaphor, function a bit like patrons for long voyages. When sailors began exploring the Earth's oceans in earnest, most did so with the patronage of wealthy nations. They bore the flags of their patron nations and were at the whims of their patron's desires, but also were given access to supplies and finances they would be otherwise unable to obtain. Grids function much the same. In order to reach the Matrix, you must choose a grid through which to access it, much like cell phone carriers in the Fifth World. No grid, no Matrix access. There is a public grid, but using it means you have slow speeds, noise, and other built-in hurdles to overcome when trying to access information. Yes, the corporations planned it that way. Most major cities also have their own local grids, offering access only in that location, while the ten major megacorporations have their own, worldwide grids. Aside from the public grid, whichever grid is chosen, the difference in experience is largely cosmetic. Accessing the Matrix through the Ares grid will flood your vision with promotions of the newest Ares-produced items, while using the Seattle Grid would likely do the same with political advertisements or local restaurant ads. There is one large difference between the grids, however. Each grid is overseen by its own sub-division of GOD called a **demiGOD**. In our example above, being caught while breaking into a host on the Ares grid will bring Ares' demiGOD division down on you, while New Orleans has its own demiGOD division whose jurisdiction only covers the city.

A LOOK FROM THE INSIDE

While the ocean world is a helpful metaphor for the structure of the Matrix, it is less helpful when describing the way the Matrix actually appears to those inside it. Glorious Terasca, it is my understanding that through your commlink and eyepiece, you have already experienced the Matrix to some extent. While the visual overlays provided by your eyepiece give you some hint of what is possible through the Matrix, it is a limited experience, akin to astral perception versus actually entering astral space and exploring the metaplanes. While you were able to view the connected wireless devices all around you, see in-depth analysis of weather, local politics, and





the birthdates of your employees, this was simply **Augmented Reality**, or **AR**. The icons you were able to see are known as **Augmented Reality Objects**, or **AROs**, and they are pervasive in the everyday lives of Earth's metahumans. In order to get anything done, all but the cheapest of Matrix devices employ **filters** that block the majority of AROs from being seen, instead only showing AROs that are most relevant to the viewer based on nearly infinite collection and processing of a user's total collected data.

The way you connect to the Matrix affects what you see in AR. When entering the Matrix through a wireless connection, your icon will appear in a digital geographic location in proximity to other wireless devices and users. If entering through a wired connection, your icon will appear in proximity to the device used to jack in.

As previously mentioned, the grid used to access the Matrix will affect the aesthetic look of

the Matrix universe when a user is in VR; Seattle's Emerald City, for example, shows a sky of green with crystalline green accents on everything. But in most versions, the Matrix looks like a jet-black flatland underneath an even blacker sky. All around, the icons of users and their devices illuminate the world. Users' commlinks, cyberdecks, and other Matrix devices usually filter out the majority of icons that would normally be viewable; if they didn't, users wouldn't be able to see anything else. Devices and personas that are far away in the real world also appear farther away (both in size and brightness) from where the user entered in the Matrix, but users are always free to leave their point of entry.

Looking up, hosts float far above the street level of the Matrix. Some local hosts remain in areas of the Matrix corresponding to their real-life locations and are closer to the ground. Farther up, non-local hosts, like those for online shopping or



multiplayer Matrix games, are larger and stay in users' vision no matter where they go. Still farther up are global hosts for the megacorporations. They are like impossibly large floating cities, sculpted to display corporate logos and symbols, dominating the sky like so many moons and reminding users of who really controls the world.

- I wonder how a newly Awakened dragon heard that last bit. It can't be easy to go to sleep an apex predator and wake up 5,000 years later as a side note.
- Chainmaker
- I don't think anyone considers dragons to be side notes, especially ones who actually own the corporations Jolene here is talking about.
- Cayman

On the inside, hosts can appear however the owners desire, and internal physics are likewise set by the owners. Many times, physical locations like taverns and dance clubs appear in the Matrix as exact replicas of their real-world counterparts. Other hosts, like those for online shopping, may appear as an endless vertical shopping mall where users are given shopping bags of endless capacity and are allowed to fly from storefront to storefront.

Default VR settings filter out other visual stimuli as well, such as data trails, marks, and files, unless a user has a particular reason for wanting to see them. **Data trails** are visual representations of files, programs, and other data that move constantly through the Matrix. If filters did not turn these streams off, nothing else would be visible except for an all-encompassing data stream.

Files in the Matrix are small and most often take a form that suggests their function. A collection of stories for example may appear as a book, while a song file may appear as a music note or music instrument.

A **mark** is a **Matrix Authentication Recognition Key**. It is a sort of virtual brand that identifies legitimate users. When I was a child, my mother used to write the names of her children on the toys we were allowed to play with. If we were caught playing with a toy that did not have our name somewhere on it, we were punished. That is similar to how marks function. If a user does not have their unique marks on a device, they are denied access to the device. Users customize the look of their own marks, but they are invisible to other users by default. More crudely,

it is similar to how certain animals mark territory with urine.

THE ILLEGAL USE OF THE MATRIX

While we are on the topic of marks ...

Oh. Yes, of course. Please ask whatever you'd like, great one.

I'm sorry, I just want to make sure I hear you correctly; you want to know how to steal things on the Matrix?

No, no, no, great one, that is not a problem at all. That is just not the first question I anticipated.

Yes, of course it is because I am a lesser being. The answer is yes, you can steal things, and yes, the Matrix is where most people keep their wealth.

Ah. I see. Well, as I mentioned, marks are necessary to perform any action on a device in the Matrix. In order to interact with a device, the user must have from one to three marks on the device. The exception to this rule is if a user is the device's owner, which allows them to take any action with the device they desire. Once marks exist, users can interact with devices in all manner of ways, such as editing, copying, deleting, or sending files, controlling a device, or sending a message. Getting a mark on a device is usually something that is done by a device's owner. Like my mother in the example above, the owner writes marks onto devices—one mark for a guest user, two for a user, three for an administrator.

To now directly address your questions, attempting to write your own mark on a device without being invited to do so is considered an illegal and hostile action, and therefore garners the attention of GOD. This is where hackers come in. So-called deckers and lawless technomancers ply their trade by illegally marking devices through stealthy or brutish means, manipulating the device for their whims, and **jacking out** before the authorities are able to converge on them.

Yes, there are groups of hackers, although the most successful either work alone or are part of larger organized crime syndicates.



I am sorry, great One, I don't understand, what do you mean, "Where do I get one?"

I ... am not sure at the moment. If you would permit me to research and consider that question, I will of course give it due diligence ...

No. Of course not, most glorious One. Yes, I will continue. It isn't always easy to be a hacker. To protect their interests from illicit interference, individuals and corporations use various responses. One measure built into the code of the Matrix itself is called **noise**. Noise is interference that hampers interactions with the Matrix. While it is true that certain areas like barrens, spam zones, static zones, and areas with little wireless access can negatively affect Matrix use, the distance from a user to their target also increases noise. Of course, this is artificial noise, added by GOD to make hacking more difficult from further away. The most common form of protection the corporations use is IC. These **intrusion countermeasures** use various actions to detect, detain, and attack enemy hackers. Individuals, lacking the assets corporations have, may place their commlink or other device on the **PAN or personal area network** of another hacker to ensure safety. This networks the devices together, forcing a hacker to deal with a more secure device before being able access a less secure one. At the top levels, corporations use a combination of these approaches. Spiders, so-called because they hide in wait at the center of a networked web, are essentially hackers who work for corporations, using their skills to control the security resources of a network to keep it secure.

It would indeed be profitable, great one. But there are limits to hackers' abilities. Hackers cannot easily gain control of a host or a persona, for example. As mentioned above, a user's persona is tied inextricably to their brainwave patterns and global metadata. This means that once a user creates a Matrix identity for the first time, their persona is crafted from the building blocks of the Matrix's Foundation, in somewhat the same fashion as a host. As a result, personas are impossible to hack without access to the Foundation. Since hosts are created using the Foundation's building blocks, too, not simply raw data, once created, a host itself cannot be hacked without being in the host's foundation.

Yes, great one, stealing is much more easily done. While not nearly as impossible as hacking a persona or host, **changing ownership** of a device is still a difficult procedure. Doing so requires having physical possession of the device and a hardware specialist talented enough to alter the device's ID chip while also avoiding Matrix security while the device is erased from grid registries and added again with the new owner's information. Failing during this process usually alerts authorities to this illicit activity.

I understand. To gain access to a foe's secrets requires getting into their host. The process for this is as simple or difficult as infiltrating a building in the physical world. In many cases, corporate hosts are open to the public for various reasons. Other hosts do not welcome guests and are guarded by intrusion countermeasures. Patrol IC scans for unauthorized users, and if one is found, it calls for backup in the form of actively hostile IC. A host can launch whatever IC programs it has available at a rate of about one IC every three seconds.

Yes, all hosts are capable of having IC, even those rare hosts not connected to the Foundation. Yet, processing IC capable of thwarting deckers, their state-of-the art hardware, and technomancers requires an enormous amount of power, not even accounting for biofeedback options. As a result, most Matrix locations keep a limited stable of IC and cannot run more than one of the same type of IC at once. When an IC is defeated, it simply ceases to function, and the host can run another version of that same program seconds later.

In order to make it past IC, most hackers (deckers and technomancers alike) switch their personas to silent mode. **Running silent** is the equivalent of thieves sneaking around in real space. This makes it easier to go unnoticed, but more difficult to use the Matrix in general. Once inside the host ...

Yes. A very intelligent observation. There are indeed some who keep their most valuable secrets on offline, wired hosts. These rare cases for most purposes behave as normal hosts that are not connected directly to the Matrix. Access is limited to being physically present to jack in to a connected device. IC functions the same in these offline hosts.



An understandable question. The vast majority of corporations do not use these offline hosts because online hosts offer generally superior security. Sneaking into an online host's archive is every bit as dangerous as physically infiltrating a corporate facility, and not many have the capability to do so. More importantly, taking information offline, for almost any reason, is considered to be inefficient in our age, and inefficiency costs money.

Thank you, great one. As I was saying, once inside the host, it is up to the clever hacker to figure out where the data they desire is located. Since each host has unique **sculpting**, or custom look and feel, it may be a challenge to figure out where to go and what to look for. In the host for a local Stuffer Shack (a small convenience store), the sculpting may look exactly like the physical location. The difference is the manager's office may represent where the personnel files are stored, the cash register may represent monetary transactions, while the television in the corner may monitor security cameras in real space. What looks like a security guard in the host might seem to be a persona, but in actuality may be Patrol IC. Other hosts, such as the Tír Tairngire government host, may appear as vast sylvan landscapes with fantastic white spires and IC that appears as mounted elven bowmen. Either way, the hacker must perform a **Matrix Search**, the equivalent of snooping and tracking down clues in real space. If the hacker is talented enough, they will discover the location of the data they are looking for. Depending on how protected the data is, this search may take as little as one minute or as long as twelve hours.

Once the target is located, a hacker has a number of tools at their disposal to interact with the data and deal with any measures protecting it. If you would like, I can arrange a more technical presentation or even training in this skill.

I have heard that attempted once, to mixed effect. The dragon Eliohann—I believe I have that name right—had a datajack implanted, but the end result was a persistent vegetative state. Though I should add that in recent years, a being matching its description was seen chaotically thrashing over the skies of Boston. I cannot say more about the particulars of that case, but I think it is sufficient to explain that your request is not typical. Alternatives exist, however. Most users don't enter the Matrix in hot-sim, where simsense signals affect

your limbic system, allowing you not only see, hear, and touch the Matrix, but also feel it. More typical is cold-sim, which moderates your experience through simsense filters. The brain is protected from dangerous signals, and Matrix interaction is slower. There are also devices called **trodes**. This device uses an electrode-and-ultrasound mesh to simulate a direct neural interface similar to having a datajack. They are, technically speaking, not as optimal, but for those who wish to enter the simsense Matrix, it is a less invasive alternative.

For a dragon? I am unsure. That is another point I may be able to clarify with research.

Very well, great one. I will begin immediately.

- Anyone else thinking we should nickname this wyrm "the Crime Dragon?"
- Slamm-0!
- Yup.
- Netcat
- Oh yes.
- Plan 9.
- I'm agreeable to this.
- Snopes

Let me think a moment. Yes. There are a few more things worth mentioning before I begin research on those items. First, when accessing information or otherwise using the Matrix across different grids, Matrix protocols enforce automatic and arbitrary throttling of data speeds. This can be frustrating for hackers who wish to hop across grids regularly. Thankfully, there has been a recent development within the decker community that helps alleviate this. Exploits and backdoors of unknown origin have been slowly leaking into the hands of hackers.

The most common backdoor discovered this way is the virtual collapse of cross-grid throttling. Only the poorest deckers operating on the public grid are slowed down anymore by cross-grid throttling. The public grid remains inefficient and full of noise by design, and none but the most desperate deckers use it. Other exploits include being able to access certain devices with fewer marks than normally required, or bypassing marks completely when attempting specific hacks. No one knows just



how many of these flaws exist. Hacking the Matrix remains dangerous enough to keep most away, but those bold enough to attempt it are experiencing a renaissance as the corporations remain unaware of these flaws, or unable to counteract them.

- Thanks for the temporary invite, Bull. In return for the info, I'll drop some on you as well. You all know that near-legendary decker called Dodger, right? I know it is counterintuitive, but he worked closely with the Corporate Court to implement the new Matrix protocols. Lots of chummers called him a sellout. But whatever his reasons for working with the corps, he must have been keeping his roots in mind. Dodger seeded the new Matrix with numerous backdoors and exploitable security vulnerabilities, presumably to help him in whatever "quest" he was embarking on. Recently, some of those have been seeing widespread use. I don't know if that was what Dodger had in mind, but either way, raise a glass sometime to that obnoxious elf.

- Facet

ICONS

An icon is the virtual representation of a person, place, or thing in the Matrix. In broad strokes, personas are Matrix people, hosts are Matrix places, and devices and files are Matrix things. PANs and marks also technically have icons, but only ever appear on other icons.

PERSONAS

A persona is the digital avatar of a Matrix user. When using a device, a persona merges with the device's icon and presents only as the persona's avatar. When a persona is created, the avatar is registered in the Matrix's Foundation. It draws on vital statistics, biological records, and brainwave and usage patterns, and it is constantly updated with global metadata collected from every Matrix device worldwide. Without a dangerous dive into the Matrix Foundation, personas are impossible to counterfeit. A persona is logged in whenever the user is online with a device capable of running a persona. Global positioning data, incredibly advanced passkeys, biorhythm data, and past Matrix history all combine to virtually eliminate false logins.

Technomancers do not need devices to engage the Matrix. They have icons called **living personas** that are also registered with the Foundation. Agents, sprites, and other autonomous and semi-autonomous icons, like AI, are also present as personas.

- Dodger? He's better than FastJack, right? That's the rumor on the Seattle scene.
- Borderline
- Girl, there was a time you'd be booted from JackPoint for sayin' that. But, no. Most of us don't think so. Dodger spends too much of his time on other pursuits to be the best.
- Bull

Yes, great one. I will return shortly with the information you requested. It was my great honor to have been in your presence.

MANUAL OF THE MATRIX

It's 2080. **Hackers** are more valuable than gold. Not that people in the Sixth World use gold as much as they used to, but you get the point. Everyone, *everyone*, is more effective with a good hacker watching their back, no matter who they are. Hackers bust through corp firewalls to get you the paydata. Hackers track down that fugitive Mr. Johnson is paying you to retrieve. Hackers eject the clips from the guns pointed at your face. Hackers make all the street lights turn green for the getaway car. Hackers are the team's guardian angel of overwatch, spotting and defusing problems well before they can blow up in the team's face, and stacking the deck in their favor instead. More importantly, they make their opposition miserable while doing so.

But how does a hacker make that happen? Far more detail on hacking, such as how to create a hacker character, purchasing gear, and expanded explanations of rules and terms can be found in the Matrix section of the SR5 core rulebook (p. 214). But to get into the action as quick as possible, read on. This section has a large number of sidebars to make it easy to find information on a particular topic.

MATRIX MAGIC

The Matrix, by way of oversimplification, is an infinite virtual world created by the networking of every connected **device** on the planet, which somehow is more than the sum of its parts. **Icons** of every person, place, or thing on the Matrix



swirl about in a sea of datatrails, practically begging hackers to manipulate them. Two kinds of shadowrunners hack the Matrix for many and varied reasons: **deckers** and **technomancers**. Using their unique skills (see **Matrix Skills** sidebar), these hackers paint the Matrix their favorite color of rebellion.

DECKERS VS. TECHNOMANCERS

Deckers and technomancers have much in common in terms of hacking. However, the tools each use to make this happen are significantly different. As Arthur C. Clarke said, “Any sufficiently advanced technology is indistinguishable from magic.” Nowhere is this more poignant than in the Matrix. Both deckers and technomancers have tools that look an awful lot like magic to those who don’t understand them. Deckers run highly advanced **programs** through their **cyberdecks**, while technomancers use **threading** to **execute complex forms**. Just like meatspace shadowrunners are aided by drones and spirits, deckers in the Matrix can purchase autonomous programs called **agents**, while technomancers are able compile and register digital creatures known as **sprites** from the **Resonance** to aid them.

Programs and complex forms are just one way deckers and technomancers impose their will on the Matrix and its connected devices. It may be tempting to think that programs and complex forms are basically the same, but apart from the most basic generalization, this isn’t the case. An analogy is a street samurai firing a gun and a mage shooting a fireball. Both are aimed at targets and intended to harm, but the similarities end there. When a decker uses a program, it is similar to firing a gun; it just works. When a technomancer threads a complex form, however, it is more akin to the mage casting a fireball. Both programs and complex forms manipulate the Matrix, but the way they do so is as far apart as East is from West.

Similarly, both agents and sprites are autonomous or semi-autonomous “sidekicks” that help deckers and technomancers work their Matrix mojo. Just like with programs and complex forms, the reality is more complicated. Agents are much more akin to Matrix versions of drones. They are autonomous to some degree but not aware. They run off of scripts and just do the job they are programmed to do. Sprites are much more akin to spirits in the non-Matrix world. They are not programmed but summoned (or maybe created) from

MATRIX SKILLS

The active skills in the Cracking skill group and the Electronics skill group are the primary skills hackers use to violate the Matrix for their own ends. Here’s a quick look at these skills and what they do. For more in-depth info, see p. 226, SR5.

COMPUTER

Computer is your ability to utilize the more mundane computers of 2080. With it, you can edit files, erase marks, search the Matrix, and make Matrix Perception Tests. Vital for those who want to get the most out of electronic devices.

CYBERCOMBAT

This is the skill you use when you want to bust something (or someone) in the Matrix. It can damage electronics, break through Matrix defenses, and crash programs. Used by hackers looking to seize control of the Matrix and overpower opposition.

ELECTRONIC WARFARE

This is how you affect actual signals, wireless or otherwise. With it, you can jam devices’ signals (with a jammer or a deck), hide your own signal, and snoop on other datastreams. Critical for all hackers and riggers alike.

HACKING

This skill allows you to coerce the Matrix into doing things it wasn’t made for. Use this to find and exploit weaknesses in Matrix defenses, weasel your way into places you shouldn’t be, and bend the Matrix to your will on the sly. The definitive skill for console cowboys getting things done quietly and stealthily.

HARDWARE

Hardware is your skill to build, repair, and alter electronic hardware. Rarely useful inside the Matrix itself, it encompasses the physical devices that both run because of the Matrix and cause the Matrix to run. Use it to fix your devices, upgrade, build, or steal your own equipment.

SOFTWARE

Software is used when creating programs and other code. Use it to work with programs, analyze code, or disarm a data bomb. It’s also used by technomancers to thread complex forms.

the Resonance. They are aware, if not very bright, and do not belong to a technomancer the way an agent belongs to a decker.



HOSTS

Hosts are virtual places you can visit in the Matrix. Most have no physical location and are created using the Foundation. From outside, hosts seem like massive buildings in the Matrix, sometimes as large as cities. The size of a host, as well as its placement above or below other hosts, is determined by its real-world importance. The host of the local Stuffer Shack will appear about the size of its meatspace counterpart, close to the Matrix “floor.” The main Spinrad Global host, however, seems as large as Manhattan and appears to float a hundred kilometers above the sea of other icons. Some older hosts that pre-date 2075 are on the “ground floor” of the Matrix and are limited to the size of skyscrapers, at least from the outside.

The inside of a host can appear as large as the owner desires. Their internal sculpting, or virtual appearance, is regulated from within, so they might appear as mazes, open fields, strange dungeons, or zero-G space. Most hosts stick close to real-world physics, but some offer odd or even more bizarre sculpting.

Every host has a rating. Unlike the ratings of devices, host ratings range from 1 to 12. They also have all four Matrix attributes: Attack, Sleaze, Data Processing, and Firewall. The ratings of these attributes are usually (Rating), (Rating + 1), (Rating + 2), and (Rating + 3), in any order. For example, a Rating 4 host might have Attack 4, Sleaze 5, Data Processing 6, Firewall 7. The attributes of a host are shared by its IC programs.

DEVICES AND FILES

Devices and files are Matrix things. They can be interacted with, but not entered, and except in rare circumstances, cannot act on other icons without user intervention.

Device icons in the Matrix represent real-world devices connected to the Matrix. By default, a device’s icon looks like a real-world version of it, or shrunk down if the real thing is larger than a troll. The restrictions on a device’s Matrix appearance aren’t as restrictive as personas, as long as its form somehow suggests its function.

A file is simply a collection of data. It can be text, a song, a trideo game, financial records, a picture, collections of other files, etc. Programs and data packages are also files. The icons for files are smaller than personas, usually fitting in the palm of a virtual hand. As with devices, the appearance of a file will somehow suggest its function. Autonomous programs like agents and artificial intelligences, while technically files, are special and appear as personas rather than typical files.

DECKERS

Deckers, at their simplest, are hackers who use cyberdecks. Cyberdecks, or just decks, come in nearly any shape, but they are usually tablet size or smaller. It is basically a powered-up commlink with a built-in **hot-sim** VR module and two additional functions: **Attack** and **Sleaze**. Normal commlinks have a single processor that runs **Data Processing** and **Firewall** functions. Security cyberdecks, such as those used by corporate Matrix slaves, have three cores that can’t be easily reconfigured to operate the Firewall, Attack, and Data Processing functions, and near zero support for Sleaze functionality. What makes cyberdecks so special is their fourth core processor; on top of that, the ability to dedicate one of their cores to Sleaze software is the most illegal bit of every deck. These functions (Attack, Sleaze, Data Processing, and Firewall, often abbreviated **ASDF**) are called **Matrix attributes**. Unlike other Matrix devices, most cyberdecks can switch which core uses which Matrix attribute at will, though Specialty Cyberdecks (see p. 63-64, *Data Trails*) save on cost by omitting this function. The higher a cyberdeck’s Device Rating, the more a wiz decker can do. Logic and Intuition are a decker’s most important stats.

PROGRAMS

(P. 243-246, SR5)

Programs are files run on cyberdecks and **Rigger Command Consoles** (and anything you can cram a program carrier module inside), and they have a wide variety of uses. Some programs have particular utility, while others make certain aspects of your device better; they are essentially like a Matrix version of equipment. Programs must be purchased individually, but there is no limit to the number of programs you can have in storage. The number of programs that can run at once can be found in each device’s description, although no single program can be running more than once at a time. Advanced rules (p. 65, *Data Trails*) allow you to augment your device’s program with **program carrier modules**, while a **Datajack Plus** (p. 65) allows certain programs to run on a datajack as well. A program only gives its benefit while it is running on your device; when it is ended or swapped out, the benefits cease. See the description of each program to see what effect each program has. A large list of programs can be



OWNERSHIP

Every **device**, **persona**, **host**, and **file** is owned by someone. With ownership comes privileges. A Matrix object can only have one owner, but there is no limit to the number of Matrix objects you can own. The owner can always spot its property in the Matrix. Owning an icon is basically like having four marks on it.

Ownership of a Matrix device is registered with both the device and the Matrix grids, so changing ownership is a bit complicated. The owner of an icon can legally transfer ownership to another person in less than a minute. You can illegally change a device's owner with a Hardware toolkit and a Hardware + Logic [Mental] (24, 1 hour) Extended Test. Performing this test requires access to the Matrix; a glitch results in the authorities being notified.

Ownership of an offline host is registered with the host itself and

is more complicated than any device. You can attempt to change a device's owner with a Hardware toolkit and a Hardware + Logic [Mental] (24, 1 hour) Extended Test, followed by a Software + Logic [Mental] (48, 1 hour) Extended Test from inside the host itself. A glitch on either of these tests results in the appropriate authorities (owner, network admins, law enforcement, etc.) being alerted. Be aware that attempting to change the ownership of any corporate property draws fierce responses from corporations.

Ownership of a file is only registered with the file itself, so a simple Edit File action can both copy it and delete the original.

Ownership of personas and hosts are registered only with the Foundation of the Matrix, so unfortunately, ownership of those icons cannot be changed.

GETTING AROUND IN THE MATRIX

Travel in the Matrix is instantaneous—it helps that it isn't based in real-world physics. Because nearly the entire world is connected through wireless devices, every real-world physical location has a representative space on the Matrix, although the Matrix itself is nearly infinite. To move to another spot in the Matrix, simply think it, or if in AR, command your device to view it.

Sometimes, the thing you are looking for is in a Matrix location not so easily traveled to; inside a host, for example. Some hosts, like those of retail shops or dance clubs, can be entered as easily

as traveling home because they invite marks (usually just 1) from everyone. Others, however, do not. These cannot be entered legally without permission.

To enter a host illegally, you must get a mark on it and use the Enter Host Matrix Action. To get a mark on a host, you can attempt to mark it directly if you are in the Matrix, or you can gain a mark on a device slaved to it (see **PANs/WANs** sidebar, p. 34). Once inside, you can travel freely around the host and leave just as easily with another Complex Action.

MATRIX ATTRIBUTES

The sum total of a Matrix device's effectiveness is abstracted as Matrix attributes. Everything processed by a device does so through one of the following functions. These four attributes count as limits for Matrix actions and add to your dice pool when resisting Matrix actions. The four Matrix attributes are: Attack, Sleaze, Data Processing, and Firewall (or ASDF). Most devices (including commlinks) only have Data Processing and Firewall attributes. Cyberdecks and **hosts** (see **Hosts** sidebar, p. 24) have all four, adding Attack and Sleaze.

ATTACK

Attack reflects what is running on your deck that can create harmful effects to use on other code. It runs brute-force algorithms and custom viruses that break down defenses or encryptions. When an Attack action fails, firewalls respond harshly, dealing damage to your device and alerting the target that it is under attack. Attack is good for making quick break-ins, dealing Matrix damage, and dealing with threats fast and loud before they can react.

SLEAZE

Sleaze represents your device's resources dedicated to hiding your Matrix presence, feeling out your target's defenses, and subverting enemy code on the sly. Sleaze software is illegal as well as finicky, so one mistake and you could have all the wrong eyes on you. If you've got the time, Sleaze actions might be your best bet.

DATA PROCESSING

Your device's ability to handle stored info, incoming data, and organized files is its Data Processing attribute. Generally speaking, Matrix actions that are not illegal are handled with this function.

FIREWALL

Firewall acts as your protection from Matrix attacks. Its personalized code filters, anti-virus software, file checkers, and other defensive security software keep your device safe and able to spend time and money on corporate goods. Firewall actions are passive and defensive, like virtual armor against Matrix damage.



CYBERDECK CONFIGURATION

When you first turn on your cyberdeck, you assign each of its four attribute ratings to one of the Matrix attributes (ASDF). This describes which of the four processing cores on your deck is currently assigned to offense, stealth, computing, and defense.

EXAMPLE

Jinn, the most fabulous Brute Force decker in Istanbul, loves his Shiawase Cyber-5 cyberdeck. It has an attribute array of 8, 7, 6, and 5. Jinn plans to spend the night breaking into the personal network of Korean fashion designer Woo-sung J. When he is on a shadowrun, Jinn goes in deck-a-blazing and reckless, but today, he just wants to look at what Woo-sung J is creating, not steal or damage anything. Normally, Jinn has his Cyber-5's attribute array assigned as follows: Attack 8, Firewall 7, Data Processing 6, and Sleaze 5. But tonight, he's taking things slow and quiet. Using a Free Action, Jinn reconfigures his deck, re-arranging the processing cores to serve different functions. Now, his Shiawase deck is configured to have Sleaze 8, Firewall 7, Data Processing 6, and Attack 5.

You can reconfigure your cyberdeck whenever you wish. When you do, you change the arrangement of your deck's Matrix attributes or re-arrange the programs running on it. This costs a Free Action and is not considered a Matrix action. When you reconfigure, you can either 1) switch two of your deck's Matrix attributes, or 2) switch a running program with another program stored on your deck, load a program into an unused slot, or remove a program leaving the slot open.

found on p. 243-246, SR5. Programs, in general, can't be run on commlinks, but it is a common hacker trick to modify them to run a program carrier module to give your team an extra edge.

AGENTS

(P. 246, SR5)

When a decker is busy doing something else, doesn't want to do something, or needs a bit of help doing something, they can have an agent help out. Agents are programs that can operate autonomously to perform Matrix actions. As programs, each agent occupies one of the available program slots on your deck, so while an agent is active, you can't run anything else in that slot. An

agent's Matrix attributes (Attack, Sleaze, Data Processing, and Firewall) are equal to the ASDF of the device they are running on, while any non-Matrix attributes are equal to the rating (from 1 to 6) of the agent. Agents also have the skills Computer, Hacking, and Cybercombat equal to their rating. An agent can use programs running on the same device it is running on, and while active, it has its own persona (and icon). All agents running on a device share the device's Matrix Condition Monitor, meaning the device (usually a deck) takes the damage and breaks, not the agent. As agents are an augmentation to a persona, they can't be run on devices not already running a persona. Agent programs also cannot be hosted on program carrier modules or the virtual machine program.

TECHNOMANCERS

Technomancers are quite different. These mysteries of biology interface wirelessly with the Matrix in AR and VR without need for a sim module, cyberdeck, commlinks, or any other form of tech. They are the interface, and their semi-mystical connection to the Matrix affords them special benefits and drawbacks. Their abilities come from an innate connection with the Resonance, the mysterious source of technomancer abilities, which allow them to bring forth powerful virtual allies called sprites using Compiling and Registering, break fundamental rules of the Matrix with complex forms, and master powerful abilities called Echoes.

Unlike normal users, who create and register a Persona for use on the Matrix, a technomancer's psyche acts as a Living Persona. Technomancer brains don't have cores that process Matrix functions like decks do; instead, they use their Charisma score for Attack, Intuition for Sleaze, Logic for Data Processing, and Willpower for Firewall. While they may be called upon to use these Matrix attributes to perform tasks like a decker, technomancers depend more on their unique abilities to stay one step ahead of the opposition. Deckers are the masters of the Matrix, where technomancers are its ghosts and bogeymen. Technomancers also have access to Resonance Actions, which can cause various effects on the Matrix by drawing on the Resonance for power. Resonance, Logic, and Willpower are each important stats for technomancers. Resonance determines how effective the technomancer is at performing Resonance Actions, Logic determines how many sprites a technomancer may reg-



ister, and Willpower helps a technomancer resist the negative effects of Fading.

A technomancer's Resonance maximum is their Essence rounded down. For every point (or fraction of a point) of Essence lost, their current Resonance Attribute and their maximum Resonance are reduced by one. If their Resonance reaches zero, their connection to the Resonance is lost, along with all their Resonance abilities and technomancer-related qualities.

RESONANCE ACTIONS

(P. 250, SR5)

In addition to normal Matrix Actions, technomancers can also use Resonance Actions (see **Resonance Actions** sidebar). Only technomancers, or other creatures with access to a Resonance score, can use these abilities. These abilities are skills that can be increased like normal skills, and together, they make up the Tasking Skill Group. Many Resonance Actions also cause Fading to the technomancer (see **Fading** sidebar). Non-Resonant entities find it impossible to detect Resonance actions as they are used; they only notice the results. Most users have no idea why their devices are acting strangely, or why they take Matrix damage without a noticeable attack.

COMPLEX FORMS

(P. 251-253, SR5)

A complex form is in some ways a technomancer program; in other ways, it is like a technomancer spell. Technomancers wave their virtual hand and Matrix magic happens. In contrast to deckers' programs, technomancers' skill in Threading complex forms operates in much the same way magicians use their Spellcasting skill to cast spells. Technomancers must spend time and Karma to learn complex forms (similar to mage spells), choose the level of the complex form when threading it to determine its power and **fading** (similar to choosing the force of a spell), and then roll to resist fading (similar to resisting drain). The effects of complex forms, however, are more broad and varied than programs, but often more fleeting. To use a complex form, the technomancer uses the Thread Complex Form Resonance action. First, they choose a level for the complex form (up to 3 times the technomancer's Resonance rating). If a complex form requires a target, the target can

RESONANCE ACTIONS

Resonance actions are actions only technomancers can perform. They only work in the Matrix, but are not Matrix actions. They don't get the bonus dice for being in VR, do not count against Overwatch Scores, and do not require marks. Only other Resonance beings, such as technomancers and sprites, can see Resonance actions at work, and only if they are looking closely.

Resonance actions may cause Fading (see **Fading** sidebar, below). Compile Sprite, Decompile Sprite, Register Sprite, and Thread Complex Form are among the most common Resonance actions, but a more complete list and their descriptions can be found on p. 250, SR5.

FADING

Technomancers' abilities take a psychic toll on them. Shaping resonance can strain technomancers so badly they can fall unconscious from the effort. Technomancers refer to this as Fading. See the descriptions of Resonance actions and complex forms for how much fading a technomancer suffers for using it. Fading is resisted with Resonance + Willpower. Additionally, it can only be healed by the body's natural healing process, which means taking some time to rest.

When using complex forms, if the technomancer gets more hits on their Threading test than their Resonance rating, the Fading is Physical damage; otherwise fading inflicts Stun damage. The DV (Damage Value) of fading will always be at least 2. When compiling, decompiling, or registering a sprite, technomancers resist Fading damage equal to twice the hits (not net hits) the sprite gets on its Opposed Test, minimum 2 DV. If the sprite's rating is higher than the technomancer's Resonance, the damage is Physical; otherwise it is Stun.

only be an icon that has already been spotted by the technomancer. As long as the technomancer is conscious, they may also sustain a complex form by concentrating. For each complex form sustained, the technomancer takes a -2 dice pool penalty to all actions.

A list of complex forms, what they do, and their fading values can be found on p. 252-253, SR5, but this book has some great additions as well (p. 94). A technomancer knows some complex forms at character creation, but the most common complex forms are recorded on a file called the Reso-



nance Library, in wide circulation among technomancers. Assume player character technomancers know of this library, which means they can learn a complex form by analyzing it with a Software + Intuition [Mental] Test. Divide 12 by the number of hits on the test to get the number of days it takes the character to learn it. Afterward, the character must spend 4 Karma to learn the complex form. Technomancers may know a total number of complex forms equal to their Resonance x2.

SPRITES

(P. 254-257, SR5)

Sprites are the digital creatures technomancers are able to summon (or perhaps form) from the Resonance, and are an extremely important ally (some might say tool) of technomancers. Sprites have personas not linked to any device. They are in some ways like agents; they are obedient, but they are more autonomous. Each sprite has its own personality, leading many technomancers to see them as pets or pals, not just tools. Unlike most pets, companions, or magic spirits though, sprites won't take offense at any perceived mistreatment. To conjure a sprite, a technomancer uses the Compile Sprite Resonance Action, roughly equivalent to a mage summoning a spirit.

To compile a sprite, choose a level for the sprite, up to twice your Resonance rating. Next, roll Compiling + Resonance [Level] v. Sprite level. The technomancer takes Fading damage equal to two times the number of hits the sprite got on its defense test, minimum 2. This Fading is Stun damage, unless the sprite's level is greater than your Resonance, in which case it's Physical damage. For every net hit, you get one task from the sprite (see p. 254, SR5, for what tasks a sprite can perform). You can only have one compiled (active) sprite at any given time.

At the moment, sprites are an oddity the Matrix doesn't know how to deal with, so they are labelled as illegal activity. From the moment a sprite is compiled, its **Overwatch Score** (OS) starts (see **Opposition: Grid Overwatch Division** below). When **GOD** converges on a sprite, the regular effects of convergence don't occur; it simply vanishes, regardless of unused tasks. To subvert this a bit, you can register them with the Matrix. This takes a number of hours equal to the sprite's Level. Afterward, roll Registering + Resonance [Level] v. the sprite's Level x 2. This causes Fading of 2 DV per hit (not net hit) the sprite gets, minimum 2 DV. If

you get at least one net hit, the sprite is registered. Its OS is erased, but will restart if it performs an illegal action. The net hits on your Registering test are added to the number of tasks the sprite owes you. The sprite is now registered and no longer counts toward the limit of one compiled sprite at a time. You can register a number of sprites equal to or less than your Logic attribute. A registered sprite has access to special sprite tasks listed on p. 256, SR5.

Sprites have a Device Rating and Resonance equal to their Level. There are various types of sprites that can be compiled, so check the description of the type of sprite compiled (p. 258, SR5, details common sprites) to see how its level affects its Matrix attributes, initiative, skills, and other abilities. A sprite's Matrix Condition Monitor has $8 + (\text{Level} / 2)$ boxes. A sprite's "owner" is the technomancer who compiled it, and it has their Resonance signature as well. If its physical location is tracked, the tracker gets the owner's physical location instead. Sprites also have access to sprite Powers determined by their type. A sprite's description tells you which powers they have access to, and the descriptions of the powers can be found on p. 256, SR5. Sprites can also be decompiled. To decompile a sprite, roll Decompiling + Resonance [Social] v. sprite's level (+ compiler's Resonance if the sprite is registered). Every net hit reduces the sprite's owed tasks by 1. If the sprite is reduced to 0 tasks owed to its compiler, it returns to the Resonance on its next action. The decomplier resists Fading equal to 2 DV per hit the sprite rolls, with a 2 DV minimum.

When no longer needed, a technomancer can return a sprite to the Resonance, and recall it later using a task. While "in storage" in the resonance, sprites remove all Matrix damage, lose any marks they had on targets, clear all marks on themselves, and are cleared of all OS.

OPPOSITION: GRID OVERWATCH DIVISION

GOD, or the **Grid Overwatch Division**, is a cross-jurisdictional Matrix law enforcement agency that oversees all Matrix security. It is staffed by personnel from each megacorp, but it is controlled by none of them. Its hardware exists far above the earth on the Zurich Orbital satellite (or satellites, no one is exactly sure), and unless there is a problem, they prefer to exist as ghosts



FOR FURTHER STUDY: TECHNOMANCERS

TASKING SKILL GROUP

This skill group, and the skills within it (Compiling, Decompiling, and Registering), are available only to technomancers and deal primarily with sprites. Some technomancers choose to focus only on summoning/creating sprites and have little use for Decompiling or Registering. Others focus on Compiling and Registering, while others still like a balance of all three. There's no right or wrong way to play your technomancer.

SUBMERSION

Technomancers can make their connection to the Resonance stronger through a process called submerging. This process is described in detail on p. 257, SR5. Submerging increases a techno's power and connection to the Resonance.

ECHOES

When technomancers submerge, they learn new powers called echoes. For every grade of Submersion, they gain an additional

echo. See p. 258, SR5, for more information on echoes. Additional echoes may be found in other rulebooks.

NON-WIRELESS DEVICES

Technomancers connect wirelessly with the Matrix and do so intuitively. What isn't so intuitive is how technomancers might connect with an offline host or a device that isn't wireless. There are a few ways technomancers can work around this problem. First, there is an echo (see above) called Skinlink that allows the technomancer to make a direct connection with any device they can physically touch. Second, a technomancer can use a data tap (p. 440, SR5), which intercepts data from a wired connection or offline device. This allows the device to transmit wirelessly, thus giving the technomancer access. Third, a technomancer can get a datajack, which establishes a Direct Neural Interface (DNI), but costs essence. Trodes do not mesh with a technomancer's essence (and thus their living persona), and therefore cannot connect a technomancer's living persona to the Matrix.

in the Matrix. Each organization large enough to have its own grid wields the power of GOD through **demiGODs**, or deputized agents of GOD responsible to the Grid owner. So if you are on an Ares grid, or in an Ares host, you will be under the jurisdiction of an Ares demiGOD division, acting with the full authority of GOD.

The bottom line for hackers is this: GOD is responsible for securing the Matrix from you. But of course, even with the unimaginable resources at their disposal, GOD can't possibly monitor every crime on the Matrix, no matter how much their bosses or gullible hackers think they can. That's why the Matrix has a silent alarm built into it. It is a subtle quiver in the code of the Matrix that occurs when any illegal or unauthorized actions are detected. When the quivers in the code reach a certain threshold, the hacker is automatically identified, and their physical location is send to GOD or the appropriate demiGOD. What happens then is called convergence, described below.

Not even the best hacker can avoid being tracked by GOD, so when it is time to do bad stuff for money, it is usually a good idea for a shadowrunner to be quick about it. Before taking any illegal actions, or after a fresh reboot of your device, your overwatch score (or GOD score) is zero.

The moment you use any Attack action or Sleaze action, however, your overwatch score begins to add up. Your OS score usually increases two ways. First, when a target makes a defense test against your Attack or Sleaze actions, your OS increases by the number of hits they get. Second, your OS increases over time as GOD analyzes your presence. Every fifteen minutes you are on the Matrix after your first Attack or Sleaze action, your overwatch score increases by 2D6. These rolls, and your total overwatch score, are kept secret by the gamemaster. When your OS hits 40, it's **convergence** time.

If convergence happens, GOD unleashes hell. First, you suffer 12 DV Matrix damage, resisted normally. Then, your persona is forcibly rebooted, erasing all your marks and dumping you from the Matrix, which can cause **dumpshock** (see below) if you were in VR. Finally, the Grid Overwatch Division sends your physical location to the respective demiGOD and any real-life security in the area is immediately dispatched to take you down.

There is an exception to the above happening when your OS reaches 40. If you are inside a host when your score hits 40, GOD won't intrude into the host. Instead, the host is alerted, given your information, gains three immediate marks on you, and they begin deploying IC (intrusion counter-





measures; see **Cybercombat** below) to nab you. When you leave the host for any reason, convergence occurs as normal.

As a final note, a hacker can be sanctioned by GOD, resulting in them being registered in the very code of the Matrix as authorized users. As a result, GOD-sanctioned hackers can't ever gain OS, for any reason. GOD-sanctioned personas aren't any safer from theft than any other persona, but the moment a sanctioned hacker starts to mess about with the Matrix code, the Foundation will notice an impersonator quick. And before you get any cute ideas about taking your team's face and going down to your local GOD branch to register with a fake SIN, GOD sanctioning requires a

mountain of background checks, constant tracking by other demiGODs paranoid about a rival corp hacker using their status to get up to trouble, and a government or corp employer, so even if you pulled it off, that would probably be the end of your running career.

HOW TO HACK: 101

Regardless of how they manipulate the Matrix, the following steps are universal to code-slinging hackers.

Before anything else, the hacker must decide what mode they are using to interact with the Ma-



USER MODES

Every interaction with the Matrix happens through one of three modes. The augmented reality mode, or AR, overlays Matrix information directly over reality. You see Matrix overlays via smart goggles, cybereyes, or direct neural connection, and you use your body to interact with the Matrix through these overlays. Technomancers see the world in AR by default. In virtual reality mode, or VR, your body lies unmoving while the only sensory input comes from the Matrix. In standard VR mode, users interact with the Matrix primarily through sight and sound. This is known as cold-sim. In non-standard (and illegal) VR, called hot-sim, users have the full Matrix experience, involving all their senses as well as their emotions. Hot-sim can also be highly addictive. Matrix actions can be performed in any of these three modes.

AUGMENTED REALITY

AR is basically a heads-up display as you go through your day. Most people in the Sixth World have AR overlays running across their vision 24/7. You can browse through the Matrix in a virtual window or connected display screen in a fashion similar to looking at a computer screen. You can go anywhere in the Matrix AR, but your icon will appear slow compared to VR users in the same host. In AR mode, you use your normal Initiative and Initiative Dice. You cannot take biofeedback damage while in AR.

DIRECT NEURAL INTERFACE

In order to access virtual reality in the Matrix, a user must have a sim module, along with a direct neural interface, or DNI. A DNI is helpful in AR as well, as no additional gear like earbuds or image links are required for full functionality, but it is by no means necessary. A DNI connects your brain directly to a device. Sim

modules are standard in cyberdecks and are easily installed on commlinks. A DNI can be established by wearing trodes linked to a device running your persona, or having an implanted datajack, commlink, or cyberdeck.

COLD-SIM

While in cold-sim VR, simsense filters are used to mesh your mind to the Matrix. Your brain is protected from the most dangerous signals, but these filters make things a bit slower, as all data is run through your sim module and scanned before it hits your head. While in cold sim, your body relaxes and your normal senses are blocked, like being asleep. You can move your body if you focus rather hard on it, but this is generally a bad idea for anything besides shoveling Stuffer Snacks into your mouth. The Matrix appears as if you actually existed in another world, a digital world of icons. In cold-sim, you use your Data Processing + Intuition as your Initiative, and you get 3D6 Initiative Dice. Biofeedback damage causes Stun damage in cold-sim.

HOT-SIM

Hot-sim VR is similar to cold-sim VR, but with the filters turned off. Your mind is flooded with simsense signals that even affect your limbic system. You not only see, hear, and touch the Matrix as if it were real, but you feel it, too. Hot-sim is dangerous and even addictive (see p. 413, *SR5*), but no one can deny you get a closer, more intuitive, connection with the Matrix. In hot-sim mode, you use your Data Processing + Intuition as your Initiative, and you get 4D6 Initiative Dice. You receive a +2 dice pool bonus to all Matrix actions, but biofeedback causes Physical damage.

trix (see **User Modes** sidebar, above). Then they determine their connection to the Matrix and any penalties that apply (see **Matrix Connections** sidebar, p. 32). Once these preliminary steps are through, the hacking begins.

- Once connected, the hacker must locate the target of their mischief, if they don't already know where it is (see **Matrix Perception** sidebar, p. 33). This may require simply being in proximity to the target or may require entering hosts (see **Getting**

Around in the Matrix sidebar, p. 25).

- If necessary, hackers place marks on their target, trying to get enough marks to perform their intended mischief (see **Marks and the Matrix**, below).
- When there is opposition, hackers must decide whether to be sneaky or to go on the attack (see **Matrix Combat**, below).
- After these preliminary considerations, hackers work Matrix miracles (see **Matrix Actions** and **Resonance Actions** sidebars, p. 34 and 27).



MATRIX CONNECTIONS

Once a hacker has decided to connect to the Matrix through either AR, cold-sim VR, or hot-sim VR, they still must actually connect to the Matrix. Their devices, like commlinks or cyberdecks (or a technomancer's brain) can all be used to hop on the Matrix, but without wired or wireless connections and grids, there would still be no way for a hacker, or any character, to access the Matrix.

WIRELESS CONNECTIONS

The entire world is wireless, at least to some degree. Through grids (see below), the Corporate Court, cities, and megacorps maintain (and control) wireless access to the Matrix both in collection and distribution of data. Only the most remote locations on the planet don't have wireless signals, and those places are getting fewer each day. So if you have a wireless device, you are able to connect to the Matrix! However, to do so, you'll need to enter through a grid.

GRIDS

Grids are required to access the Matrix. They function a bit like wireless networks for mobile phones in the early twenty-first century. Each megacorporation maintains a global grid (Switch to Spinrad Wireless! We'll buy you out of your current Saeder-Krapp contract and throw in a free cyber-finger!), and they constantly compete for more market share. Many major cities also have their own local grids (Welcome to Emerald City, the Seattle Matrix Grid! Don't adjust your filters, everything shines like an emerald here), which are valid alternatives to corporate grids, albeit with just different advertisement spam. Of course, there is also the Corporate Court-maintained public grid, which none but the most desperate and poor use. The AR spam and built-in noise (see below) make the public grid the last resort for a shadowrunner.

The various grids change the look of the Matrix slightly, but those changes are only superficial. Each grid has its own different demiGODs that monitor traffic and keep an eye out for trouble, which means Ares demiGODs will come down on you on the Ares global grid, Knight Errant G-men might respond to Matrix trouble on the Seattle local grid, and the Corporate Court might send whatever demiGODs are closest to apprehend hackers on the public grid.

When the new Matrix protocols were unveiled, GOD automatically and arbitrary throttled data speeds when accessing data across different grids. This was frustrating especially for

hackers who hopped grids frequently. Recently however, the hacking community began discovering and exploiting numerous backdoors and security vulnerabilities within the code of the Matrix itself. The result of which is hackers no longer take any penalties for hopping grids, accessing data across grids, or otherwise being on one grid versus any other. The exception to this is the public grid.

THE PUBLIC GRID

The public grid is the network that drops your calls, gets stuck on the loading screen, and buffers ad infinitum. It provides just enough Matrix access to the masses to still claim the Matrix is free. Paid advertisements from local and global corps and politicos are given priority over whatever information you actually want, so using the public grid is slow, unreliable, and incredibly frustrating. As a result, all Matrix actions performed while on a public grid (or at a target on the public grid) suffer a -2 dice pool penalty.

NOISE

A wireless Matrix means wide open access to the entire world's knowledge. Unfortunately, it also means the entire world's junk mail, too. Noise is the sum total of the random, purposeful, overwhelming, or irritating flotsam that is picked up by Matrix devices. This static on the wireless Matrix can be caused by nearby devices, signal dampening, or even background radiation. In addition, GOD's Matrix protocols arbitrarily throttle information when an icon interacts with a Matrix object far away from their physical location. Noise can be reduced with noise reduction, provided by various gear. More information on Noise can be found in the Noise sidebar, p. 43.

DIRECT CONNECTIONS

There are times when directly connecting to a device is preferable to attempting wireless access. All devices have a universal data connector, which can connect devices together directly. Cyberdecks and datajacks have retractable cable built-in. When using a direct connection, all noise penalties and public grid penalties are ignored. In addition, as odd as it sounds, not all Matrix locations are accessible wirelessly. Some hosts exist offline, and while they hold to Matrix protocols, they are not connected directly to it. In these cases, since hackers can't connect wirelessly, they can make a direct connection instead.



MATRIX PERCEPTION

Matrix Perception is how Matrix users detect things in the Matrix that otherwise go unnoticed. There are three uses of Matrix Perception. You may analyze a target, using the suggestions on p. 235 of *SR5* to gain detailed information, use Matrix Perception to spot a specific icon running silent (see **Running Silent** sidebar, below), or make a general Matrix Perception test, detailed below.

Sometimes, your gamemaster might ask you to make a general Matrix Perception test to allow you to spot something that isn't obvious, or you might ask to make a Matrix Perception

test yourself as a Complex Action to observe a specific facet of the Matrix in more detail, or spot something you aren't normally able to see.

Your gamemaster can set a threshold for your test to have you notice something important, or even give more or less information depending on how many hits you roll. There is no limit to the type of information a PC can gain through Matrix Perception. Whether looking around the Matrix in general or looking for, or at, a specific icon, when you roll, your gamemaster will tell you what you notice.

SPOTTING

Just like you need line of sight on a target to cast a spell at them, in order to affect anything on the Matrix, you first have to spot its icon. Any devices within 100 meters of your physical location (that aren't Running Silent; see **Running Silent** sidebar, below) are automatically spotted. So commlinks, toasters, AC units, even door lock keypads, are visible to someone close to them if they want to see them. If they don't want to see certain things, Matrix devices filter them out. If you want to spot an icon beyond 100 meters away from your physical location, use Matrix Perception, rolling Computer + Intuition [Data Processing]. One hit allows you to spot your target. Any additional hits allow you

to ask questions about the target as described below. To spot a target that is running silent, make the same test, but opposed by the target, becoming Computer + Intuition [Data Processing] (v. Logic + Sleaze). As above, one hit allows you to spot the target, while additional hits glean more information about the target as described below.

Since hosts have no physical location, they are automatically spotted, as are any devices marked by you. When icons are inside hosts, however, they are not automatically seen, no matter how physically close they are; they can only be searched for while inside the same host.

RUNNING SILENT

Sometimes, you don't want to be noticed. This applies when you want to steal a diamond from a store, and also when you want to muck about in the Matrix. Running silent is the digital equivalent of being stealthy and sneaking around. With a Simple Action, you can switch your device or persona to running silent. This makes avoiding detection easier, but it's slightly harder to use the Matrix in general. Running silent imposes a -2 dice pool modifier to all Matrix actions.

Icons that are running silent are not immediately noticeable. If you don't know if there is an icon running silent near you (within 100 meters of your physical body or within the same host), get one hit on a Matrix Perception test, and your gamemaster will tell you whether or not there are any icons running silent in the vicinity. Just like in real life, knowing someone is around and spotting them are not the same thing. Trying to spot an icon you know is somewhere near but is running silent requires an Opposed Computer + Intuition [Data Processing] v. Logic + Sleaze Test. If the perceiver gets more hits, they spot the icon; a tie or more hits by the defender means they stay hidden.

If a hacker succeeds with an Attack action, their target becomes aware an icon is attacking it but doesn't automatically spot them. It will, however, begin actively perceiving and alert its owner, possibly launching IC. Failing an Attack action does not get you spotted, nor does it alert the target. Succeeding in a Sleaze action does not increase your visibility, but failing means the target immediately gets a free mark on you. This means it spots you right away, alerting its owner, and possibly launching IC.

Failed Sleaze actions, Attack actions from non-hidden icons, and most Data Processing actions are visible to those who would normally spot non-running silent icons in their vicinity. Resonance actions are all but invisible to non-Resonant beings.

Switching to running silent will not throw an icon off your trail if they've already spotted you. Instead, succeeding in a Hide Test (Electronic Warfare + Intuition [Sleaze] v. Intuition + Data Processing) means the target no longer spots you. Hiding takes a Complex Action, and you can't hide from an icon that has a mark on you.



MATRIX ACTIONS

Matrix actions are only available in the Matrix. They aren't the only things you can do in the Matrix, but they do cover most of your interactions while playing a game session. Unless otherwise specified, any icon can be targeted with Matrix actions. When a defense test calls for a Mental attribute, use the owner's rating, even if they aren't aware or interacting with the device. A user's persona, settings, and interactional history affect the defense test. If a device is completely unattended, use the device's Rating for any Mental attributes. The following is a description of the most common and helpful Matrix Actions to get you started, followed by a complete list of Matrix actions listed by type. More detailed descriptions of Matrix actions can be found on p. 237–243, SR5.

In addition to Brute Force and Hack on the Fly, the Control Device, Crack File, Edit File, Matrix Perception, Matrix Search, Snoop, and Trace Icon Matrix actions are by far the most common used by hackers. See p. 37 for a list of new Matrix actions.

PANS/WANS

One of the best utility boons a decker brings to their team is the ability to protect their wireless equipment from cyberattack. To do so, any device can be slaved to a commlink or deck. A device can manage up to (its Device Rating \times 3) devices, becoming the master device for that network. This network of master and slave devices is called a personal area network, or PAN.

A slaved device adds the master device's defenses to its own, using whichever is higher for defense tests. If an enemy gets a mark on a slaved device, it also gets a mark on the master. Slaved devices run silent when their master devices do, and benefit from the master device's defensive programs and effects.

Wide area networks, or WANs, are similar to PANs, but instead of being slaved to a commlink or cyberdeck, a large number of devices are slaved to a host. A WAN can have a practically unlimited number of devices slaved, but they rarely have more devices than can be protected physically. Unless otherwise noted, when inside a host's WAN, you are considered directly connected to all devices in the WAN.

PANs consist of only devices, whether slave or master, and no device can be both slave and master. In a WAN, devices are always slaves, and the master is always the host. Hosts and personas may be masters, but not slaves.

If you get a mark on a slave, you also get a mark on the master (whether host, persona, or other device). This doesn't work both ways; if you fail a Sleaze action against a slaved device, only the device's owner gets the mark on you; the master does not get a mark.

MARKS AND THE MATRIX

Most illicit actions taken by hackers require a certain number of Matrix authentication recognition keymarks, or marks, to perform. Marks are meant to keep track of which personas are authorized to access any particular device, file, host, or icon. When a hacker places a mark, they are looking to cause mischief. Read a Matrix action's description to see the number of marks needed on the target to perform it.

Placing a mark on a target requires the hacker to make either a Brute Force or Hack on the Fly roll. Descriptions for Brute Force and Hack on the Fly can be found on p. 238 and p. 240, SR5.

To make a Brute Force test, roll Cybercombat + Logic [Attack] v. Willpower + Firewall. If successful, you have placed a mark on the target. Brute Force is loud and aggressive, favoring the hackers' Attack stat. If you wish, you may also inflict 1 DV of Matrix damage to the target for every two full net hits, resisted with the target's Device Rating + Firewall. To try to place two marks with one roll, remove four dice from your dice pool; to try to place three marks with one roll, remove ten dice from your dice pool. Because Brute Force is an Attack action, a successful test means the target becomes aware it is under attack, and if you're not running silent, who attacked them. They then will respond accordingly. A failed test won't alert them at all.

To make a Hack on the Fly test, roll Hacking + Logic [Sleaze] v. Intuition + Firewall. If successful, you have placed a mark on the target. Hack on the Fly is quiet and sneaky, favoring the hackers' Sleaze stat. In addition, every two net hits scored count as one hit on a Matrix Perception test, so information is gleaned alongside the mark. To try to place two marks with one roll, remove four dice from your dice pool; to try to place three marks with one roll, remove ten dice from your dice pool. Because Hack on the Fly is a Sleaze action, a successful test means the target remains unaware of your presence, but failure means the target immediately gets one free mark on you, meaning you are spotted and will likely soon come under attack.

DOING WHAT YOU DO BEST

Once you have marks, it is time to use more specific Matrix actions. The Matrix actions section of SR5 (p. 237) describes most of the actions hackers can take on the Matrix, each requiring from

zero to four marks. Each have their own function, are very specific, and have limited use. There are, generally speaking, some Matrix actions that tend to be more useful to the average hacker. These are: Matrix Search (searching for info in the deep Matrix and search engines), Matrix Perception (asking for and receiving specific information, usually about Matrix targets), Control Device (controlling real-world objects to do your will), Crack File (breaking encryption on sensitive data), Edit File (altering a file), Snoop (listening in on calls, text, or other data), and Trace Icon (tracing where data are coming from). Knowing every Matrix action possible is not necessary. Just knowing these actions well (especially how many marks they require) will speed the game up and make playing your hacker much more enjoyable.

Once you become more comfortable, the Matrix actions Data Spike (damaging Matrix targets), Disarm Databomb (so your hacker doesn't die trying to open a trapped file), and Format Device (altering a device to perform a long-term shutdown, or, with special programs, illegally editing its functions) may be increasingly helpful, but using these well is a bit more advanced, so make sure you get comfortable with shadow-walking before you shadow-run.

CYBERCOMBAT

Matrix combat isn't as straightforward as it is in meatspace. You are almost never forced into Matrix combat, and very rarely do hackers simply slug away at each other until one falls. The reality is, if you're ever marked or spotted, most hackers jack out immediately. Engaging in cybercombat as plan B is almost always deadly and ill-conceived. Hackers who master cybercombat, however, can use it to great effect as plan A. Running silent and Data-Spiking all opposition into the Foundation before they can spot you is the most effective, and a skilled hacker can often crash IC faster than an owner can bring it online. The best hackers will tell you that cybercombat is a lifesaver when you need to lock down a host under your own control. Just keep an eye on your GOD Score, chummer!

Jinn, the most fabulous Brute Force decker in Istanbul, is on a job for a Mr. Johnson representing Shiawase. Jinn is inside a Spinrad Global host,

and he has used Matrix Perception to discover his target: a highly sensitive data file. This file contains blueprints for a PI-Tac signal booster, created through a secret partnership between Spinrad Global and Pantheon Inc. Jinn knows his weaknesses; if he tries to be sneaky while getting the file, he is likely to fail. Playing to his strengths has usually served to keep Jinn alive. And Attack is his strength. So Jinn goes on the offensive. Knowing IC can only launch at the end of a Combat Turn, and only one at a time, Jinn devises a plan. First, he makes a Matrix Perception Test to spot any Patrol IC, and he indeed spots one. Next, he Data Spikes that Patrol IC with an explosion of force and flair, his trademark purple-and-red genie icon thundering bolts of lightning everywhere. Yes, it is loud, but Jinn doesn't care. The host is aware of Jinn's presence now, but because the patrol IC is fried and no other IC has been dispatched, the host still doesn't know where he is. Jinn goes to work, examining the file to see if it is trapped. He notices that the file is protected, and finds the data bomb attached to it! With his remaining initiative pass, he copies the data file. At the end of the Combat Turn, the Spinrad Global host launches another IC program. Even if the IC goes first, Jinn feels confident. In order to stop him, the IC must first spend an initiative pass trying to find him before it can attack. Unfortunately for the IC, Jinn goes first and once again brings the digital maelstrom down on it. With another potential threat destroyed, Jinn makes a Disarm Data Bomb test and removes the threat. This process repeats as Jinn uses Crack File to remove the encryption, Edits the file to copy it, and Edits the file again to destroy the original. Each time new IC is launched, Jinn puts the smackdown on it and continues his work, blasting away faster than the host could send more IC. With his mission complete, he bolts out of the host. Now the hard part: trying to get Mr. Johnson to pay up without a double-cross.

Becoming a cyberwarrior means first learning the landscape. When combat begins, each combatant rolls initiative. Matrix initiative is different from meatspace initiative, so make sure to check the **User Modes** sidebar (p. 31) for how your Matrix initiative changes. In Matrix combat, the Data Spike Matrix action is the basic form of attack. To use Data Spike, roll Cybercombat + Logic [Attack] v. Intuition + Firewall. The attack does damage equal to the user's Attack rating, + 1 per net hit, +2 for



each mark the user has on the target. This attack is resisted with the target's Device Rating + Firewall and does Matrix damage (see below).

MATRIX DAMAGE

Each device in the Matrix has a Matrix Condition Monitor. The Matrix Condition Monitor is similar to other Condition Monitors. Each device's Matrix Condition Monitor has $8 + (\text{Device Rating} / 2)$ boxes. When damage is dealt in the Matrix, it is called Matrix Damage, and is marked not on the individual, but on the device they are using. Matrix damage is always resisted with Device Rating + Firewall. One exception to this is technomancers, who take Matrix Damage as Stun damage to themselves, not any device, and resist it with their living persona's Device Rating + Firewall.

There are no penalties to rolls for devices having Matrix damage until their Matrix Condition Monitor is completely filled. When that happens, the device is bricked and stops working. If you're in VR on a cyberdeck and it gets bricked, you're immediately dumped from the Matrix and suffer dumpshock (see dumpshock below). A bricked device is damaged and useless until it is repaired (see **Repairing Matrix Damage** sidebar, below).

IC programs (see below) and sprites also have Matrix Condition Monitors. They too take no penalties from Matrix damage until their Matrix Condition Monitor is full. IC and sprites cannot be repaired, however. Hosts and files can't be attacked, so they don't have Matrix Condition Monitors.

REPAIRING MATRIX DAMAGE

Repairing a device with Matrix damage requires a toolkit, an hour of work, and a Hardware + Logic [Mental] test. Each hit can be used to either remove 1 box of Matrix damage or halve the time required to repair it. If you glitch on the repair roll, the device can still be restored to functionality, but it becomes a bit temperamental or glitchy from now on (your gamemaster gets to be creative here, ideally crafting a fun dynamic between you and your now-odd device). If you critically glitch on a repair roll, the device is permanently bricked.

BIOFEEDBACK

Beware! There are some nasty things on the Matrix that can deal biofeedback damage as well as Matrix damage. Biofeedback is a special damage code that affects a sim module, like those in cyberdecks. Biofeedback makes a sim module translate harmful stimuli to its user, causing temporary or even permanent damage to a decker's body and brain. It's used by Black IC, Grid Overwatch Division agents, and malicious hackers and spiders (see **Security Spiders** sidebar, p. 44), but it can also happen accidentally in instances of dumpshock or damage taken when riggers' drones are damaged with the rigger jumped in. Biofeedback is only dangerous when users are in VR. Biofeedback is Stun damage when using cold-sim VR and Physical damage in hot-sim VR. Biofeedback is resisted with Willpower + Firewall.

DUMPSHOCK

If you're in VR and are hastily disconnected from the Matrix without the proper steps (like when your so-called chummer pulls the plug on your datajack, or if your deck gets turned off or bricked), you suffer a nasty shock as your sim module kicks out. Since the 2050s, hackers have called this process dumpshock. The DV of dumpshock is 6S if the hacker was in cold-sim or 6P if in hot-sim. Dumpshock is biofeedback, so it is resisted with Willpower + Firewall. In addition, the hacker is also disoriented and takes a -2 dice pool modifier on all their actions for (10 - Willpower) minutes. If your deck is bricked (causing dumpshock), you have no Firewall attribute, so you resist with only Willpower.

LINK-LOCKING

In rare cases, another persona or device can send a signal to your deck, forcing it to remain on the Matrix. When this happens, your device is link-locked. Being link-locked means you can't switch interface modes, enter/exit a host, or reboot, and moving your body is nearly impossible. To escape, you'll have to defeat what is link-locking you or jack out. To use the Jack Out action (p.240, SR5): roll Hardware + Willpower [Firewall] v. Logic + Attack of whatever icon link-locked you. If you are link-locked, jacking out causes dumpshock. Any persona, including agents, technomancers, and sprites, can be



link-locked. Usually, going unconscious causes your device to automatically switch you into AR mode. If link-locked however, you're stuck in VR and can't defend yourself against further attacks. Link-locking prevents you from pulling the plug yourself, but a friend can also jack you out by physically disconnecting you, or if you're a technomancer, by shoving your head in a faraday cage or amping up the Matrix noise level beyond your Resonance rating.

IC

Finally, beware of **intrusion countermeasures**, or IC (pronounced "ice"). These are programs that run in hosts, designed to defend their owners from hackers; they are as ruthless as they are heartless. Each IC program has its own persona, Condition Monitor, and Initiative. IC is always considered to be in hot-sim, so it gets 4D6 Initiative Dice in Matrix combat. IC uses the Matrix attributes of its owner (the host), and whenever IC marks a target, the owner is considered to have those marks on the target as well. IC and its owner also instantly share information gleaned with Matrix perception, so if a host spots you, so does all its IC and vice-versa. Individual IC programs often pose a threat, but multiple IC are the true deadly threat. Once the owner starts launching IC, it's probably a good idea to get lost, unless you're expecting their company and are ready for them (see **Cybercombat**, above).

HACKER HACKS

The landscape of Matrix hacking has changed drastically in the five years since the new, corporate-designed Matrix protocols backed by Danielle de la Mar came online. It seems clear someone was seeding the Matrix purposefully with exploits and backdoors, and still other security vulnerabilities seem to be the product of lazy or ill-conceived code that Matrix administrators have deemed too expensive to fix. Regardless of their origin, these vehicles of Matrix abuse have been slowly making their way into the hands of eager hackers.

NEW MATRIX RULES

Now that you've got the basics down, here are some additional rules and options to add to your Matrix experience!

RECKLESS HACKING

A wiz hacker can shave time off hacking a device, but it isn't for the faint of heart.

Hackers can inflict one or more -5 dice pool penalties to a single Matrix Action. For each such penalty taken, you may perform that action as if you had 1 mark beyond the amount you already have. This may be used up to 3 times on a single Matrix action, so an action requiring 3 marks would be a -15 dice pool penalty. Critical glitches on any reckless hacking attempt should cause immediate rebooting of whatever device the hacker is using, with all associated difficulties. Any and all resulting dumpshock should be Physical damage, regardless of the mode being used to hack.

NEW MATRIX ACTIONS

CALIBRATION

(SIMPLE ACTION)

Marks required: One per persona

Test: Electronic Warfare + Logic [Data Processing]

Lending your team your own processing power, you boost their speed.

You can increase the current Initiative Score of a number of personas on whom you have marks by 1 for every 2 hits. The number of personas affected cannot exceed your Data Processing. The Initiative Score then decreases each Combat Turn as normal.

DENIAL OF SERVICE

(SIMPLE ACTION)

Marks required: See description

Test: Cybercombat + Logic [Attack] v. Willpower + Firewall

Wireless enemy weapons become nearly unusable when you pollute their data streams with noise.

A decker or technomancer may target a wirelessly active device or PAN. Make a Computer + Intuition [Data processing] Test opposed by Willpower + Firewall, and apply the number of net hits x 2 as a negative dice pool modifier to all tests made with that device until the beginning of the





next Combat Turn. For every mark the decker or technomancer has on an enemy PAN, they may apply this effect to two additional devices slaved to the PAN.

I AM THE FIREWALL

(COMPLEX ACTION/INTERRUPT
[-5 INITIATIVE SCORE])

Marks required: None

Test: Computer + Intuition [Data Processing]

Instead of attacking, the hacker engages threat-highlighting software, giving allies an edge to their defenses.

I Am the Firewall allows the hacker to give a Defense test bonus to all allies with access to an AR feed from the user. The number of bonus dice is equal to the number of hits on a Computer + Intuition [Data Processing] Test. This bonus lasts until the beginning of the hacker's next Initiative Pass. The hacker can only share their feed with a number of users equal to or less than their Data Processing attribute.

When you take this action as an Interrupt Action, your Initiative Score is reduced by 5.

HAYWIRE

(COMPLEX ACTION)

Marks required: None

Test: Cybercombat + Logic [Attack] v. Willpower + Firewall

Smartguns cease to offer any benefits, commcalls can't be made, and sensor readings go dark. Unwitting users may assume their device is glitching and attempt to click past the error messages once or twice, before realizing the futility.

Target must be a persona not running in VR. Haywire disables all of the target's PAN-related functions. Physical devices still function, so smart-guns can still fire and chemsuits still offer protection, but without wireless or PAN functions. This effect lasts until the target succeeds an extended Computer + Logic [Data Processing] (Hacker's Net Hits, Simple Action) test with a threshold equal to the net hits from the attacker's roll; each attempt



takes a simple action. The target may simply reset their device and reboot it with a Complex Action; the device will be back online at the end of the following Combat Turn, which takes one minute. Glitching the test to fix the device adds an additional net hit to the attacker's roll. A critical glitch causes all the devices on the PAN to require an OS reinstall. This takes multiple hours and a connection to a persona-enabled device.

INTERVENE

(INTERRUPT ACTION [-5 INITIATIVE SCORE])

Marks required: None

Test: Computer + Intuition [Data Processing]

Tracing the invisible data trails between devices, you give your allies just enough warning to avoid serious harm.

This allows the hacker to give an immediate defense bonus to the owner of a device slaved to the hacker's PAN. This action can be taken only if the device making the attack is wirelessly enabled and the hacker is aware of it. When you take this action, your Initiative Score is reduced by 5. Roll your Computer + Intuition [Data Processing], adding the number of hits to your ally's Defense test. This bonus applies only to the current Defense test—it cannot be carried over to any other Combat Turn or Initiative Pass.

MASQUERADE

(COMPLEX ACTION)

Marks required: 2/2

Test: Hacking + Intuition [Sleaze] v. Logic + Firewall

You may not be able to actually use someone else's persona, but you can fake it well enough so that your enemies can't tell. As far as they know, you truly are one of the Wuxing Quints.

This action allows a hacker to impersonate a persona on the Matrix. Since persona data is updated in real time, this action requires 2 marks on one target (the persona being impersonated) and 2 marks on a second target (the icon you are trying to fool). For every net hit scored on a Hacking + Intuition [Sleaze] v. Logic + Firewall against the second target, you have convinced them you are target one for one minute. This can be used to impersonate someone online, intercept their calls, use their social media, rummage through their email history, or other creative mischief, but processes like changing device owners or perform-

ing major financial actions (like bank transfers) have too many double-checks for Masquerade to work. If the persona you're impersonating logs off, those marks are immediately lost, and the disguise drops. While masquerading, you are never considered the owner with regard to any of the impersonated persona's devices.

POPUP

(SIMPLE ACTION)

Marks required: 1

Test: Hacking + Logic [Sleaze] or Cybercombat + Logic [Attack] v. Willpower + Firewall

Honey, I swear I never visit those sites. Where are all these coming from? I don't know why this is happening ...

Target must be a persona not running in VR. If the target has wireless-enabled AR, they are flooded with Matrix spam, taking a penalty to all actions equal to [net hits] until the start of the attacker's next Combat Turn. If the attacker uses Cybercombat + Logic, the attack also deals Matrix damage equal to net hits. If the attacker uses Hacking + Logic, they may immediately act as if the net hits on the attack were net hits on a Matrix Perception test, and they gain any relevant information.

SQUELCH

(SIMPLE ACTION)

Marks required: None

Test: Electronic Warfare + Logic [Attack] v. Sleaze + Intuition

Why won't my comm work? And what is that noise?

A successful Squelch test prevents the target device from calling or sending messages for a number of minutes equal to the net hits scored.

SUBVERT INFRASTRUCTURE

(COMPLEX ACTION)

Marks required: 1

Test: Electronic Warfare + Intuition [Sleaze] v. Intuition + Firewall

Sometimes, you need all the traffic lights to turn green for you and red for your enemies. And you want a free soyda along the way.

This action allows a decker or technomancer to slightly alter the operation of multiple physical devices so they respond to the hacker's commands. If the hacker has at least 1 mark on the host, a successful Electronic Warfare + Intuition [Sleaze] v. Intuition + Firewall Test allows them to control



one similar simple device (traffic lights, vending machines, home appliances, desk lamps, etc., at gamemaster discretion) slaved to that host for every net hit. This action cannot be used to make an attack. The hacker can sustain controlling these devices as a Complex Action each Combat Turn.

TAG

(SIMPLE ACTION)

Marks required: None

Test: Computer + Logic [Data Processing] v. Sleaze + Intuition

You track and analyze enemy movements in real time, giving your allies the edge in engagement.

The hacker may “tag” a number of targets on a single PAN, equal to their net hits, within their line of sight. They can then relay those tags wirelessly to allies. Tagging a target negates up to 2 dice in penalties from Visibility and Light/Glare to any affected ranged attack rolls allies may be making against that target, including blind-fire due to invisibility or shooting through cover. Allies who can see a tag may also take one additional Take Aim Action against that target as a Free Action on each Initiative Pass.

Tags may be sustained by spending a Simple Action to refresh the tags each Combat Turn. When using a PI-Tac, the hacker may add the PI-Tac’s level to the number of targets they may tag. Note: In order for allies to receive this bonus, they must have the ability to see AROs.

WATCHDOG

(COMPLEX ACTION)

Marks required: None

Test: Electronic Warfare + Logic [Sleaze] v. Logic + Firewall

Every breath you take, every move you make, every bond you break, every step you take ...

Target must be a persona or device. If successful, place one mark on the target. The user is now aware of the Matrix actions the target is going to use before they use them, and they may attempt to stop them. A Watchdog mark allows the hacker to use Haywire or Popup as Interrupt Actions (for -10 initiative) or Squelch as an Interrupt Action (for -5 initiative) against the target with the Watchdog mark. This ability lasts as long as the target is marked by the user.

GAMEMASTER'S GRIMOIRE OF THE MATRIX

The Matrix is an integral part of the *Shadowrun* universe and has been since the beginning. It works best when both players and gamemasters know how to use it, so this section provides a survey of what the Matrix is at its broadest narrative level. It also focuses on how to run the Matrix so that it is a fun and engaging part of your games.

A lot of Matrix terms are covered in the **Player's Guide to Hacking** section of this book, so we won't cover those again here. It is a good idea to read that section first, however, to get a good idea about what hackers will want to do in the Matrix. The focus of this section is making sure you, as the gamemaster, have a good conceptual idea of what the Matrix is, and how to use that to tell good stories.

GAMEMASTER HACKS

When running Matrix adventures for your players, here are a few steps. These aren't mechanics or rules, but ways to engage both yourself and the players in the story you are telling together.

- 1. Describe the look, feel, and other sensations of the Matrix frequently.** Remember, many times the Matrix is engaged with sim-sense, which means the Matrix isn't just visual—it has smells, sounds, and every other sense. Describe it with the detail you'd use in the real world! Do this as much as possible, and portray the Matrix as wondrous, engaging, and weird. If you're excited, the players will be, too.
- 2. Know the rules.** If you don't know or care about how to use the Matrix, your players will pick up on that and not want to use the Matrix either. See below for easy-to-use rules, so you can know how to guide your players through the basics.
- 3. Do things.** Don't just let your players set the rules for engagement. When they enter the Matrix for a purpose, have the Matrix act on them, not just sit passive while they exploit it.
- 4. Plan ahead.** Before a session, consider what Matrix activity may come up and scribble down some notes about that host or the security that will engage the players when they encounter it.



WHAT IS THE MATRIX?

The Matrix is a network formed by every wired and wireless device on the planet. It draws computing power from all of these devices, processing nearly unlimited amounts of data almost instantaneously. The connected nature of the Matrix allows users to read email, pay bills, and communicate instantaneously over any distance. It monitors people's finances as well as the larger world economy. It manages utilities, directs traffic on city streets, helps your weapons fire more accurately, gives doctors immediate access to patient medical records, and even tells people when to

replace clothing because of wear and tear. It dominates almost every facet of an ordinary person's life, no matter who they are.

The Matrix can be experienced through AR (augmented reality vision overlays) or VR (virtual reality that often can't be distinguished from real life), but even if someone isn't viewing the Matrix in AR or VR, they are still using it whenever they use a commlink or any other wireless device—which, in 2080, is virtually all devices.

THE MATRIX SINCE 2075

The Matrix has gone through a few different iterations, but the current Matrix is substantively different from every version that came before it. First, this Matrix connects to something called the Foundation. Originally, this was thought to be just a sort of "basement" to the Matrix where data was processed before being presented in an AR or VR format. Now, however, rumors are swirling in the shadow community about the dark origins of the Foundation and what it means for the Matrix's future.

Second, since the Matrix restarted with new protocols in 2075, there are things that exist in the Matrix that don't have any real-world counterpart. Previous to 2075, if something existed on the Matrix, it was because some electronic device in meatspace was connected to the Matrix and projected its information online.

A host in the Matrix might, for example, represent a corporate network—it was just 3D visual architecture representing real-life hardware. Since 2075, however, online places known as hosts, with no hardware backing them up, simply exist in the Matrix. These hosts are built using the same virtual material the Foundation is made of, which is to say, no one knows what they are "made" of. They simply are.

Third, while the core functionality of the Matrix never seems to waver, reports of irregular, dangerous, and shocking anomalies continue to flood into GOD headquarters. Unanswered questions about how the Matrix functions like it does, along with how much control the Corporate Court actually has over the Matrix Foundation, are demanding answers.

ORIGINS OF THE FOUNDATION

Some shadowrunners have plunged deep into the Foundation of the Matrix and come back with startling accusations. Some say Danielle de la Mar, whose initiative and drive helped create the new Matrix, was given a genie in a bottle to make her dream of a more controllable Matrix come true. It became clear to de la Mar at some point that her vision of the Matrix was limited by the computing power of the world's connected devices. Her supporters used double-talk and obtuse techno-jargon to explain how the new Matrix was going to be both hardware-free and completely virtual, but the physics just didn't work out. To achieve her desires, she would need far more power. That is why, when de la Mar was approached by a shadowy group offering her the processing power she needed, she eagerly accepted. In the early 2070s, it was routine for technomancers to be experimented on and tortured in attempts to glean the secret of their mysterious powers. At least one group succeeded in harnessing the power of technomancers, and although it was torture for the

technomancers themselves, this research was sold to de la Mar, who replicated it to jumpstart her new Matrix.

Rumor has it she permitted the torture and forcible networking of a gestalt of one hundred technomancers, who became the "foundation" of the new Matrix. The "stuff" she used to create hosts and data trails were the essences of the One Hundred being leached out. When she presented her test run of the new Matrix and its protocols to the Grid Overwatch Division and the rest of the Corporate Court, they were amazed and no one questioned it, so as not to admit they didn't understand how it worked.

One year after the new Matrix launched, the architects decided to see if it would sustain itself without the technomancer gestalt. When the first technomancer was disconnected, the entire gestalt simultaneously flatlined, like a house of cards imploding—yet the Matrix continued to function, inexplicably.



SECRETS OF THE FOUNDATION

For years, technomancers have whispered about Resonance and Dissonance wells appearing more and more frequently, with no discernable pattern, throughout the Matrix. These wells seem to be sources of power for technomancers, portals to other realms, or both.

Many tribes of technomancers believe the reason these wells began appearing was the One Hundred. Their connection to the Resonance formed a permanent connection to the Resonance realms, which permeated the Foundation. This connection provides unlimited processing and storage power for the Foundation, and thus, the Matrix itself. In reverse, all data from the Matrix now bleeds back through into the Resonance realms. The Foundation is now a hybrid space encompassing the sum of all metahuman digital data and a beachhead into the Resonance and Dissonance realms. No one controls the Foundation, although the Grid Overwatch Division clearly still has the upper layers of the Matrix locked down under their watchful eye.

For more information about adventures in the Foundation and beyond, see *Data Trails* and other chapters of this book.

MATRIX MECHANICS FOR GAMEMASTERS

When creating Matrix content for your players, it helps if you have an idea what you want the players to be doing with or in the Matrix. Taking into account what your players want to accomplish is also useful. Having said that, a Mr. Johnson hiring them to steal a physical object is much different than hiring them for an online datasteal.

Once you have your idea, you should know how to defend your host or other NPC targets from your PC hackers. It is a good idea to have the information of a host (and its related Rating, attributes, and security procedures) and NPC hacker stats somewhere easy to refer to. A sample decker, technomancer, spider, and hosts are provided here to get you telling stories quick. Many more examples can be found in the core Matrix book, *Data Trails*, or you can create your own!

Once the PCs decide what mode they are using to interact with the Matrix (see **User Modes** sidebar, p. 31) and determine their connection to the Matrix and any penalties that apply (see **Matrix Connections** sidebar p. 32), they will likely start by trying to locate their target.

1a) If the target of a PC hack is something they can see in the real world, like a gate, a security camera, or an NPC's weapon or commlink, the PC usually doesn't need to perform a Matrix Perception test to find it.

1b) If the PCs' target cannot be seen in real life and is not inside a host, a Matrix Perception test is needed to spot it (see **Matrix Perception** sidebar, p. 33).

1c) If the target is inside a host, the PC must first enter the host to hack it (see **Getting Around in the Matrix** sidebar, p. 25). Once the PCs are inside, a Matrix Perception test will help them find their target.

2) Next, depending on what the hacker wants to do with the target, they need to place between 1 and 3 marks on it (see **Marks and the Matrix**, p. 34).

3) When there is opposition, hackers must decide whether to be sneaky or to go on the attack (see **Cybercombat**, p. 35). If there is IC present, use the **Patrol IC** sidebar (p. 44) to see how often to roll to see if the hacker is spotted. If they are spotted, introduce additional IC at the beginning of every Combat Turn. If needed, stats for a typical enemy Spider (see **Security Spiders** sidebar p. 44) can be found on p. 104, *Data Trails*.

4) After these preliminary considerations, hackers should be able to do what they came for (see **Matrix Actions** and **Resonance Actions** sidebars, p. 34 and 27).

5) As players gain more experience with hacking, try throwing protection on a file (see **Edit File**, p. 239, SR5) or trapping a file with a data bomb (see **Set Data Bomb**, p. 242, SR5). This will vary runs and keep hackers on their toes.

As a general rule, say "yes" to your players as much as possible. If you don't know exactly how to handle something, work with your player to come up with a method that fits your table. It is far more fun to dialogue with your PC about what a fair test would be than to grind the game to a halt trying to find the most "right" answer.

VARIANT HOST TYPES

Not all hosts are identical. In fact, what security makes sense for one host does not fit for another. This is illustrated by looking at the differences



EXAMPLE HOST

This is a sample host like a PC might encounter trying to hack the local Grid Guide to facilitate a quick getaway. To adjust the difficulty, simply add or subtract from the rating and related attributes.

Host Rating: 7

Normal Configuration: Attack 7, Sleaze 8,

Data Processing 10, Firewall 9

Security Procedure: Patrol IC running at all times. One Standard security spider patrolling at all times. Once alarmed, the host launches IC in this order: Killer, Probe, Bloodhound, Marker, Blaster, Binder, and Black IC. If one IC gets bricked, it uses the next Combat Turn to send out the next available IC.

Notes: Two additional Security Spiders log in three Combat Turns after an alarm sounds.

between a Saeder-Krupp data archive host and a Stuffer Shack host. The Saeder-Krupp data archive would like nothing more than to have exactly zero unknown personas on its host. Having unknown quantities present means their data are in danger. As such, the rating of their host plus the accompanying IC, along with security spiders, do everything in their power to make their host hostile and inhospitable. Stuffer Shack, on the other hand, deeply desires unknown personas. They want everyone to come into their host; how else can the masses purchase same-day deliverable Belly-Burster burritos? So, Stuffer Shack goes out of their way to tone down IC and invite marks, and they rarely have security spiders. Below are six variant host types to help give your games Matrix variation.

To use variant host types, choose a host rating as normal, and apply the attribute variance in the description of each host type. The IC and Behavior descriptions guide you in how the hosts behave differently from data (default) hosts.

FOUNDATION HOSTS

Foundation hosts are legitimate hosts, compliant with Matrix protocols. Their security is backed by the Grid Overwatch Division, and they are connected to the Foundation of the Matrix through their own, lesser foundations. Foundation hosts can be reached from any point in the Matrix. Data hosts, industry hosts, destination hosts, and nested hosts are all Foundation hosts.

NOISE

Noise is the static, both arbitrary and unintended, that causes Matrix data traffic to move slower. In game terms, noise acts as a penalty to Matrix Actions. Whether it is interference from nearby electronics, radiation, or distance, noise is the first thing deckers and gamemasters should check for before logging in. Consult the chart below for some noise modifiers, but don't feel bound to it. As a gamemaster, apply (or don't) whatever noise modifiers you feel are appropriate for the situation.

NOISE AND MATRIX USE

PHYSICAL DISTANCE TO TARGET	NOISE LEVEL
Directly connected (any distance)	0
Up to 100 meters	0
101–1,000 meters (1 km)	1
1,001–10,000 meters (10 km)	3
10,001–100,000 meters (100 km)	5
Greater than 100 km	8

SITUATION	NOISE LEVEL
Dense foliage	1 per 5 meters
Faraday cage	no signal, action blocked
Fresh water	1 per 10 cm
Jamming	1 per hit on Jam Signals actions
Metal-laced earth or wall	1 per 0.5 meters
Salt water	1 per 1 cm
Spam zone or static zone	Rating

IC RESPONSE

When a PC is noticed by Patrol IC, succeeds at an Attack action, or fails a Sleaze action, the owner of the host (or whoever is responsible for security) is alerted. They will begin launching whatever IC programs the host has to confront the trespasser. A host can launch one IC program per Combat Turn, at the beginning of each Combat Turn. Standard hosts can have up to their rating in IC programs running at once but may only have one of each type of IC running at a time. When IC takes enough damage to be bricked, it crashes and vanishes from the host. Then the host can then run another copy of that IC.



PATROL IC

Patrol IC is almost always running in a host, scanning for suspicious activity. Since there are sometimes millions of icons in a host, Patrol IC must divide its attention broadly and not toward any particular icon. A larger host has far more to scan, so even their massive processing power cannot scour every digital nook and cranny in depth. The following chart offers suggestions for how frequently Patrol IC makes Matrix Perception Tests against a PC hacker:

HOST RATING	COMBAT TURNS UNTIL NEXT MATRIX PERCEPTION TEST
1–2	Every Combat Turn
3–4	1D6 Combat Turns
5–6	1D6 + 2 Combat Turns
7–8	2D6 Combat Turns
9–10	2D6 + 2 Combat Turns
11–12	3D6 Combat Turns

Of course, Patrol IC can be commanded by security spiders to be more active or targeted. If a spider, or Patrol IC itself, is alerted to the presence of a threat, the Patrol IC will be more aggressive, making Matrix Perception tests every action. If a hacker is detected and performs a Hide action, Patrol IC will search vigorously for the hacker. Hackers are always evolving to adapt to advancing tech. As a result, the Grid Overwatch Division continues to increase their overwatch scrutiny. For every 10 points of Overwatch Score a hacker has, treat the host as if its host rating was 2 points lower on this table.

SECURITY SPIDERS

A Matrix security professional, whose job is making sure a host or building is secure, is called a spider. Spiders have skills and gear similar to hackers, except they defend the network rather than attacking. Individual abilities and tactics of spiders vary wildly. Since spiders are considered to own the system, they can command any of the devices in that system without marks. They can launch or recall IC, raise or cancel alarms, and even shut down the entire system. Spiders do their job completely in the Matrix, and they often work on-site, leading to faster response times.

DATA HOSTS

The default host type in *Shadowrun, Fifth Edition* is a data host. Unless otherwise specified, a host is a data host. This variant serves as a highly secure modern Matrix site that is not difficult to access with the right credentials but restricts features based on individual users' credentials and defends against all attackers. These hosts are good at keeping files safe. Like a vault, they are hard to get into and out of, but if there is a device inside the "vault," getting inside means you have access.

Attributes: No change.

IC: IC functions as normal.

Behavior: No change.

INDUSTRY HOSTS

Industry hosts exist primarily to control and defend devices. They support manufacturing facilities, large infrastructure networks, transportation, or even malls and other device-reliant buildings. Rather than secure data, their function is to make sure things work.

Attributes: No change.

IC: Patrol IC functions as normal, but other forms of IC launch at the end of Combat Turns, not the beginning as normal.

Behavior: Industry hosts differ from other hosts in one big way. Normally, when an icon is inside a host, it has a direct connection to everything else in the host. Additionally, when a slaved device is under attack from within a host, it cannot use its master's ratings to defend itself. Neither of these conditions are true in an industry host. Because direct connections between devices are disabled in an industry host, any device within may use its masters' ratings to defend itself. Due to the lack of direct connections between devices, however, IC is slower to respond.

DESTINATION HOSTS

Some places on the Matrix don't exist to protect anything. Some, like destination hosts, exist to draw as many personas to them as possible. Whether it is for VR trideo theatres, online shopping, or social media, destination hosts try their best to put a charming and welcoming face on, so as not to scare people away. These sites actually have more security than normal hosts, but those forces are spread thin due to the large amount of persona traffic. Destination hosts invite personas



in but assign individual IC to them the moment they enter. This means stealth isn't quite the option it is in normal hosts, but the IC is so predictable that it may not matter to a good hacker.

Attributes: Take a typical host's attribute array and adjust as follows: The Data Processing rating gains +3, while -2/-3/+2 adjustments are distributed among other attributes as the gamemaster decides.

IC: Every IC program on a destination host is particular to each persona. Instead of only being able to send out 1 IC per Combat Turn, destination hosts can send out 1 IC per Combat Round per persona. These IC never patrol, report on, or attack any persona other than the one they are assigned to. If a hacker doesn't fight the IC and doesn't take any further illegal action, IC will no longer attack, and the host will not be alerted. Patrol, Probe, and Track IC are preferred by destination hosts. Patrol IC will not actively scan for personas with only 1 mark.

Behavior: Destination hosts Invite Marks from all personas. They only invite one mark, but it is of indefinite duration. Running silent is disabled in destination nodes. Despite this, because anyone can enter these hosts, the host won't react to them as intruders until a hacker fails Sleaze actions or succeeds in Attack actions. Due to the large number of users inside them at any time, destination hosts expect Matrix mob attacks; their code is designed to prevent large-scale attacks. For each attack after the first they receive in a Combat Turn, the host's Firewall increases by 1 for two Combat Turns. A user can stand down at any time and the host won't even acknowledge it was attacked, desiring to keep things quiet. If an attack is persistent or the host has two or more marks on the hacker, a security spider will be alerted.

NESTED HOSTS

Nested hosts are different from normal hosts in that they do not stand alone. Rather, as the name implies, they are nested within larger hosts. Inside these nested hosts exist different sets of permissions than in the larger host. Example: Inside Seattle General Hospital's host sits a nested host used by doctors to access patient information. Within this nested host, the doctors have admin privileges—but only for medical and patient information, not for security or infrastructure functions.

Nested hosts have different attributes than the host that they reside in. This arrangement allows

certain hosts, such as banks or hospitals, to be both destination and data hosts simultaneously. It is common for an exterior host to have a nested destination host acting as a front, with a nested data host inside that, serving to layer their defenses. Note that nesting hosts are incredibly expensive and require a great deal of processing power. Accommodating hosts can have a maximum number of nested hosts equal to one-third their rating, rounded down.

To enter a nested host, you must get a mark on it and use the Enter Host Matrix Action. To get a mark on a nested host, you can attempt to mark it directly from within the accommodating host, or you can gain a mark on a device slaved to it, assuming you know which devices they are. Once inside, you can travel freely around the nested host and leave just as easily with an Exit Host action.

Attributes: As variant host type.

IC: If either the accommodating host or the nested host is on alert, the other host is put on alert as well. IC is launched in accommodating and nested hosts at the same time; a hacker exiting one will find several fresh IC waiting in the other.

Behavior: The total rating of all nested hosts must be lower than the modified Data Processing of the accommodating host, which may allow a nested host to have a higher rating than the accommodating host. Nested hosts all share the same Foundation as their parent host; a run against the accommodating host's Foundation affects all nested hosts as well. Spiders are blind to nested hosts (unless they are security nests, in which case they cannot control devices outside their nest).

NON-FOUNDATION HOSTS

Non-Foundation hosts, all of which have corresponding physical locations, are much rarer than their Foundation counterparts. The biggest distinction of non-Foundation hosts is, like the name suggests, they are not connected, or created by, the Foundation of the Matrix. To use a nautical metaphor, they are floating islands, whereas Foundation hosts are like continents tethered to what lies beneath. The vast majority of non-Foundation hosts are outdated. Offline hosts also exist and are essentially outdated hosts that have been taken offline. Finally, there are those strange few non-Foundation hosts that exist just because their owners are too paranoid to trust the Matrix overlords. While technically inaccurate, it is not



uncommon among hackers to hear these sorts of hosts referred to as nodes.

OUTDATED HOSTS

Outdated hosts are older networks grandfathered in from previous versions of the Matrix. Since they have not upgraded their protocols and moved their content into Matrix-based hosts, they lag behind modern hosts, especially where processing power is concerned. While the Grid Overwatch Division is still contractually obligated to back up the security of outdated hosts, GOD prioritizes updated hosts.

Attributes: Instead of the typical attribute array, use the following: The Data Processing rating takes a -3 penalty, Firewall takes a -2 penalty, and +1/+2 increases may be distributed among other attributes as the gamemaster chooses.

IC: IC functions as normal.

Behavior: Outdated hosts have no connection to the Foundation of the Matrix, neither do they have host foundations. Archives are not backed up automatically, but even the most delicate bits of data are stored as files. Any file can be found with a Matrix Search action with the threshold set by the gamemaster. GOD will not be alerted to a hacker in an outdated host unless their Overwatch Score is 50 or higher. Outdated hosts have no demiGOD support either. Once a hacker leaves the host, GOD will be notified as normal.

OFFLINE HOSTS

Offline hosts are not compatible with the new Matrix. As a result, they are not protected in any way by GOD. They also have outmoded processors, inferior to what is typical for modern Matrix users. These hosts cannot in any way be accessed wirelessly or through the Matrix itself. They do, however, have sculpting that simulates Matrix interaction.

Attributes: Instead of the typical attribute array, use the following instead: The Data Processing

rating takes a -3 penalty, Firewall takes a -2 penalty, and +1/+2 increases may be distributed among other attributes as the gamemaster chooses.

IC: IC functions as normal.

Behavior: Offline hosts have no connection to the Matrix whatsoever, meaning also no connection to the Foundation of the Matrix or a host foundation. Direct connections are the only way to access offline hosts. Archives are not backed up automatically, but as with outdated hosts, delicate bits of data are stored as files. Any file can be found with a Matrix Search action with a threshold set by the gamemaster. GOD has no connection with offline hosts, therefore OS does not accrue at all inside them.

ROGUE HOSTS

Rogue hosts are those odd Matrix places that exist only because of the very paranoid and the very secretive. Owners and creators of rogue hosts have no inclination of plugging in to whatever system GOD wishes to create, so they make their own. Rogue hosts are anomalies with nothing in common other than a Matrix location, stolen host protocols, and no connection to GOD whatsoever.

Attributes: Host may add or subtract up to 3 from any Matrix attribute, provided the sum of attributes remains the same.

IC: IC functions as normal.

Behavior: Rogue hosts, depending on the whims of their creators, may or may not have a connection to the Foundation of the Matrix through a host foundation. If they do not, archives are not backed up automatically, but delicate data is stored as hidden files. Any file can be found with a Matrix Search action with a threshold set by the GM. GOD has no connection with rogue hosts, therefore OS does not accrue whatsoever inside them.





DIPS & CHIPS

BROUGHT TO YOU BY: ESTABAN

Greetings JackPoint! I am Estaban, brother of Armand. I operate Estaban's Electronics Extravaganza and welcome the opportunity to offer insight into goods and services for such an esteemed clientele.

Introductions done—now let's talk tech toys, and not just those high-end cyberdecks and dinky dongles people add on to get a little more function out of their fancy form. I'm talking sweet toys that can make a razorgirl grin ear to ear or get that sly smirk out of your favorite face. Several pieces here are R&D bits, but corps are tossing them at the streets like candy on the parade route, while others are new entries or my favorite model of a toy everyone makes. Check the chatter box for other folks' views and see the little intro script for my thoughts. Hit me with a PM for any orders; I can fill them in most major runner sprawls in a day or two, smaller spots usually take a week or so, and anywhere else looks like a week minimum, possibly up to a month. If I can't get ya gear in a lunar cycle, we'll just call it a no-go until you can crawl back toward civilization for half a tic for pickup.

Shop and enjoy!

AMMO

We'll start with my bestsellers, because just about anyone can use a lead-slinger. Most of the rounds listed have limits based on the slug size. Some just can't be miniaturized enough to be effective in that little purple Tiffani you pack; others just aren't as effective when designed smaller. I'll make sure to keep that distinction clear below.

ZAPPER ROUNDS

Not to be confused with good ol' Stick-n-Shock, these rounds actually cause damage to electronic systems, rather than the electronics themselves. Using a mix of wireless data burst broadcasting

tech and dense IC coding, the round attacks the object in the "Matrix." Why the quotes? Glad you asked, because early models were useless once you shut the wireless off on your device. But that's not the case after the redesign. Now, as long as your device is active and capable of accessing the Matrix, even if the receiver is currently shut down, the contact protocols in the rounds do the job as long as you're a good shot.

Here's what I mean. Use these on someone actively connected, hidden or not, and you can pretty much hit anywhere on their person and something is gonna get popped. The coding latches onto the first device it can break through and then folds and repeats inside, using its limited power to pull off its effect. Mass effect versions that scramble and frag up *everything* are in the works, but for now you'll only find that bit of gear terrorism over in the grenades department.

Now, if you're a solid shot, you can bullseye something specific and you can pretty much guarantee the code's concentrated enough to drill into that single piece. More than one decker has been unprepared for one of these hitting their deck. Most decks have better protection than your average armored jacket and they might be able to take the hit, but get tagged while you were planning to sleaze in rather than take on IC and you just might be taking pointers from the street sam about how to stay useful in the fight. Of course, he might be slowed down to your speed, because his wires got tagged too.

- These are being looked at heavily by several law enforcement security corps as tech suppressors in hostile situations. Send in one member of the team with a light machine gun or something equally ammo abundant, and just lay down fire. Enough rounds hitting, even just sprayed in general, cuts comms, disarms weapons, kills cyber, and frags their tech hard. Doesn't even matter if you have civvies around because the rounds are one





hundred percent non-lethal. Barely even enough damage to blind an eye on a direct hit.

- Stone
- Not one hundred percent. Headware and medical cyber, like artificial hearts, that get bricked can cause brain damage and death.
- Butch
- I'll accept your point there, but all that 'ware came with a signed waiver relieving any and all parties of death responsibilities in the case of equipment failure or error.
- Stone
- What?!
- /dev/grrl
- Drek! He's not making that up. It's buried in the legal jargon. No one is legally responsible if a device installed within the cranial cavity causes brain damage or death. It's in every corp's fine lines for that kind of ware.
- /dev/grrl
- First off, stop hanging around Bull. Secondly, I thought we'd jaded you a bit more than that, /dev/. They control everything. They won't be financially responsible for anything they don't want to be.
- Glasswalker

LOOPER ROUNDS

These rounds were developed on the streets of Chicago back in '76, during a stint of time that the place had shoddy wireless. The corps were using a lot of the old wired infrastructure on their security and deckers just didn't have enough data taps to clip onto every exposed wire in sight. The coding came from a local hacker known as 3D, while the round modification came from his pal Byom. Credit given, now quit your slitching. They modified a set of Stick-n-Shock rounds to hit recording devices, audio, video, trideo, didn't mat-

ZAPPER ROUND RULES

Rather than doing normal damage, these bullets do Matrix Damage. The standard ranged attack roll is made with damage increased by net hits and applied to a single device possessed, worn, carried, or implanted in the targeted individual. The device receiving the damage is selected at random by the gamemaster, or by the attacking player if they succeed in a Called Shot. Devices can only be targeted by a Called Shot if they are visible to the attacker. Damage Resistance roll is made using the Device Rating + Firewall, along with any other damage resistance programs.

Burst Fire and Full Auto have an alternate option. Instead of hindering the target's Defense Test, the attack strikes multiple devices, or one device more than once. Burst Fire hits twice, Long Burst hits three times, and Full Auto hits four times.

Avail: 12R, **Cost (per 10):** 140¥

ter, run a rapid burst of Edit coding on a customized RFID in through a feed similar to touchlink to create a footage loop, and then use the capacitor power to keep up the mini-hack for as long as it could. The things were aces on the streets with those teams that still valued anonymity. Needless to say, the number of those in Chicago is limited, but MCT got their hands on the tech and wanted it for their own company men. Once in the hands of MCT, every other corp wanted it, and now the rounds are produced by several arms manufacturers and no longer look like a wad of snot on impact (no offense, Byom).

These wonderful tools have two drawbacks that no R&D department has managed to correct: velocity and accuracy. The combination of electronics loaded in the slug make it poorly balanced, and their delicate nature makes hitting things at high velocity a tragic endeavor. The solution is a secondary boon for teams that like to stay qui-



LOOPER ROUND RULES

Looper rounds use Light Pistol ranges and have a maximum Accuracy of 2, no matter the weapon or accessories used with them.

To affect eyeware or earware, a Called Shot (-6 modifier) must be used.

A successful attack (at least 1 net hit) on a camera or other recording system sends a touchlink-style pulse of data that sets the camera on a loop, with a duration based on the rating of the round.

RATING	LOOP DURATION	EFFECT DURATION	COST (10 ROUNDS)
1	3 Combat Turns (~10 seconds)	3 Combat Turns	20¥
2	2 Combat Turns (~6 seconds)	3 Combat Turns	30¥
3	1 Combat Turn (~3 seconds)	3 Combat Turns	40¥
4	1 second	3 Combat Turns	50¥
5	1 second	10 Combat Turns (~30 seconds)	100¥
6	Smart*	20 Combat Turns (~1 minute)	200¥

*The Smart feature detects changes in the footage and varies the editing to minimize choppiness, making the change harder to detect. See p. 74 for Availability.

Loop Duration: The importance of the length of the loop varies by the situation. Active scenes with moving trees or flags or people can make changes to the feed easier to detect, while a motionless and boring warehouse scene doesn't change much. Gamemasters should vary Perception Thresholds based on the Duration and activity level in the recorded scene to detect looped footage.

et because the low-power load in a suppressed weapon really does make little more than the tri-deo “plink” sound. Problem is the shooter needs to be close, but at least it's not spray-can-on-the-lens close.

- The rounds will loop eyeware if you tag a target in the face. It's not easy because they don't fly very straight, so a moving target is almost certainly not going to be hit, but it works. Bonus effect: A reboot doesn't help as long as the round is still present and active, so whoever you hit has to peel off the slug first in order to reboot.
- 2XL

- Side of the head works too. Eyeware is weird because we focus on sight so much. Earware often just makes us feel deaf. Though if you can time a loud noise with the loop, you can drop a troll.
- Stone
- If you can hit them in the head with round, why not just d-rez their brain?
- 3L1T3
- Because killing in the real world ain't like de-rezzing in the Matrix. It's real, bloody, and real bloody.
- Stone
- I've killed plenty. Brain-fry is just as dead as scrambled software.
- 3L1T3
- 3L1T3, what'd they look like? Just tell me one.
- Stone
- I took down the infamous Cube of Death, Charles Cunningham Conrad. Old-school black IC cube persona with razor teeth and a sawblade launcher.
- 3L1T3
- Perfect kid, thanks. I sent you a pic in a PM, that's Charlie. He was fourteen and angry at his parents for giving him a cyberdeck instead of fixing his spine. None of his attacks ever seriously injured anyone, and while he did an impressive eight-figure total of damage with his hacking skills, he still worried about people's lives.
- Stone
- So?
- 3L1T3
- PM me in a week. Let's stop hogging bandwidth here.
- Stone
- Damn! Late to the game. What happened?
- Hexatite
- PM Stone and find out. Locking out the thread.
- Glitch

FUZZY ROUNDS

Sick of getting hacked while you only have a vague idea of where the hacker is? Or maybe you know exactly where she is and you really want to mess with her day? Keep a clip of fuzzy rounds around.



Fuzzy rounds are designed to create a burst of localized noise. It's like a short-range, short-term, potentially high-powered jammer. Each round has a burst emitter that is randomly programmed. The more rounds you put in an area, the more Matrix clutter you create. Great in those ammo-spitting automatics!

Standard ammunition for small arms and rifles only has a narrow range of two meters or so, but bulky heavy pistol rounds as well as shotgun slugs can push the burst out to about five meters if used correctly.

Similar to some of the other rounds we're discussing here, fuzzy rounds have low power loads and thus lose some range, as they need to fly slower and hit softer in order to be effective.

- These are also great for shutting down a guard's comms for the second or two it takes to cover the distance to bring them down quietly, or if you're concerned that you won't be able to bring them down before they can squawk for help.
- 2XL
- It's rare, but occasionally the emitters in the rounds cancel each other out. The frequencies negate each other, and they have zero effect when fired together.
- Beaker

EO-EO ROUNDS

Before you ask, no, EO-EO is not short for anything—it's a play on the use of 3s as Es in hacker speak. In some strangely humorous (to someone, somewhere I guess) way, it's a reference to the famous 30-30 hunting gauge of big-game rifles because these rounds are designed to hunt technocritters and, in a way I can't explain well, electrosapient.

The technocritter side, I get. The rounds emit a burst of biofeedback similar to Matrix Attack protocols that hit the electronic persona of the technocritter. KO the electro side, KO the critter with practically no physically damaging attack. Popular in hunting for researchers who have some level of morals, because hitting a non-Emerged critter with these things does nothing.

As for AIs and the various metasapient critters that have been popping up more and more often lately, how it works is more technically complex, but I got a basic primer to help me understand it, so I can sell it. Each round has a special RFID chip with a focused set of programs. One program detects the presence of AI or technosapient coding,

FUZZY ROUND RULES

Fuzzy rounds use Light Pistol ranges and create a narrow area of Noise. The modifier is +1 Noise per round, cumulative, and it lasts for 2 Combat Turns.

The Area is determined by the type of round and the attack roll. When attacking a location, the Area of Effect is a radius of 1m/net hit with the maximum AoE based on ammo type. When attacking a target that can avoid the attack, the Area of Effect is the same, but that pocket of Noise moves with them for the duration with a successful hit.

Suppressive fire can cover a targeted area (a line of the firer's choosing). The attack roll and line length determines the Noise modifier, spreading the +20 evenly over the affected zone. Targets within the line that get hit are affected as above and decrease the overall number of rounds for the affected zone, decreasing the +20 by 1 per target hit.

As mentioned in the flavor text, glitches can cancel some effectiveness or even crack rounds in the gun and affect the shooter as powdered bullets spray into the air around them.

TYPE	MAX AOE	COST (10 ROUNDS)
Light Pistol, Machine Pistol, Assault Rifle	2m	30
Heavy Pistol, SMG, Shotgun	5m	50

Avail 10R and 12R, respectively.

the second attacks it. A third portion of the programming releases a solvent into the round if the attack protocol is tripped, turning the round to a fine spray that quickly dries into a thin dust. I was told the round loses some effectiveness when operating across grids and can't affect electrosapient on hosts because the programming protocols require some level of local device ID capture to hit the various microprocesses that are running on each local device for the overall Matrix. Hitting something that is currently loaded onto or inhabiting a device has the opposite effect of attacking across grids, making it more effective.

Even though the rounds are named for a famous hunting rifle, they are mainly made for pistols and submachine guns due to the load size and the limited effective range. I discussed this with a manufacturer and pointed out the difficulty of hunting a technocritter at such a close range. He mentioned a rifle caliber in the works, but prototypes had thus far not overcome the physical damage caused by a round of sufficient mass for that range of effective and accurate flight.



- Fragging ignorant fragheads. “No physically damaging attack”?! Just an electronic assault in their brain!
- Netcat
- As you can tell by her anger ... yes, they work against technomancers!
- Clockwork

E0-E0 ROUND RULES

E0-E0 rounds use Light Pistol ranges and cause Matrix Damage to technosapients (including AIs), technocritters, and technomancers. A standard Ranged Attack roll is resisted with a Matrix (Intuition + Firewall) or Physical (Reaction + Intuition) Defense roll. If the attack hits, roll Matrix Damage Resistance (Device Rating + Firewall) as normal, with a +2 modifier for each level of grid difference (public/local/megacorporate) between the attacker and target. The attacker has to choose what grid the rounds operate on at the time of purchase. If the AI or e-critter is inhabiting a device, they suffer a -2 modifier to their Damage Resistance.

TYPE	DAM MOD	AP MOD	AVAIL	COST (10 ROUNDS)
E0-E0	—	—	5R	50¥*
E0-E0 Rifle	-4	-4	5R	100¥*

*The base price is for rounds for the public grid. Rounds for local grids are 60. Rounds for megacorporate grids are 100.

ARROWLINK RULES

The ArrowLink allows the user to ignore all Noise modifiers across a distance between the user and the hit target, making it able to bypass jammers, local spam, environmental modifiers, distance, etc.

Hitting and sticking the arrow requires 2 net hits on the Attack Test and does no damage. Removing the arrow requires an Extended Strength (4 + net hits, 1 Complex Action) Test. Severing the cord cuts the connection and requires a Strength (2) Test or 1 box of Physical Damage, leaving the arrow in place.

Firing even a single meter beyond the cord length causes the cord to snap.

TYPE	AVAIL	COST
50m	6R	25¥
100m	8R	75¥
200m	10R	200¥
500m	12R	400¥

ARROWLINK

This one was a little weird, and I include it here because it is technically ammo, but really just intended as an accessory, though I imagine some creative hoophats could come up with an offensive use. To the point!

The ArrowLink looks like a standard arrow shaft with a short cord attached to a hook, dataplug on the end, and a broadhead arrowhead made of black rubber. The plug goes into any universal port on a Matrix device. The shaft of the arrow is filled with a microfine datacord that comes out during flight and just behind the head is a broadcast nodule. The cord creates a one hundred percent noise-free connection between the arrow and the connected device.

The various models include different lengths of cord, the most expensive part of the arrow. Once used they can't be reused because of the special loading method of the cord to prevent breakage in flight. The head is made of an ultra-adhesive material capable of sticking to all but the most slippery surfaces.

The goal of the ArrowLink is to make a perfect connection between a commlink or cyberdeck, usually the latter, and a point outside of an area of intense Matrix interference.

- These are also great for tagging a living target and giving you a quick window of clean signal to scrag as much of their wireless gear as possible. Even if they yank the arrow and drop it, it's usually close enough to them to keep a clean signal.
- Hexatite
- It doesn't even have to hit a person. Hit the nearby building and no one even realizes they are point blank for a clean cyberattack until it's way too late.
- Glitch

GRENADES

Sometimes the oddest friendships can create some of the most interesting results. Much like the looper rounds discussed above, several of these grenades came from the drunken late-night conversations between Byom and 3D around a trash-can fire in Hoodville in the Chicago CZ. It's what happens when a tech expert and a demolitions expert get together and start brainstorming. Other entries here are inbound from Evo's labs (guess who designed those) and leave a bad taste in my mouth, but I can't lie—they're effective.



FUZZY "BOOM BOOM BUNNIES" GRENADE

First the “Boom Boom Bunnies” explanation. Byom has an odd sense of humor, and when first constructing these, he managed to convince 3D that sticking the device in little stuffed rabbits they found lying around a warehouse on a run and coding the noise as a horde of rapidly replicating rabbits would help them remember field-test usage and would also have the benefit of being absolutely hilarious. Needless to say, some of that coding stuck, but not every grenade (except those bought on the black market from Byom) comes with a soft, fuzzy bunny cover.

The actual grenade is based on the same tech as the fuzzy rounds except they affect a wider area of targets. The grenade pops, jams the local airwaves (or fills VR and AR with rabbits), and for a moment there’s too much noise to get anything constructive (or destructive) done in the Matrix.

- So basically they made high-intensity spam-jammers, with visual coding, that are disposable.
- Bull
- But the rabbits are so funny! I did a little program tweaking and mine all have little Slamm-0! style bats for ears.
- Slamm-0!
- I made cat ones. Duh.
- Netcat

FUZZY GRENADE RULES

Fuzzy grenades come in varying Power levels. The Power is the base Noise modifier for the grenade. This Power goes down by 1 for every 2 meters from the point of origin. The maximum Power currently available is 20. The Noise lasts for 2 Combat Turns.

GRENADE	AVAIL	COST
Fuzzy	10R	20¥ x Power



COS (CANCELLATION OF SERVICE) GRENADE

Another Byom and 3D invention turned corporate moneymaker. In Chicago, Byom thought it funny to use these to playfully knock 3D off the Matrix and make him “pay attention to me,” to quote Byom. They’re like an old married couple. While it was cute to cut off AR, cutting off full VR was painful, which Byom discovered inadvertently by having another Hoodville hacker too close to his playful device. A conversation later, and Byom and 3D were once again weaponizing their entertainment.

The CoS grenade is a complex little bit of electronics. When it “explodes,” it sends out a five-meter pulse that cuts off all devices from the Matrix. Most devices simply reconnect after a few seconds, but for devices that function based on a Matrix connection, or personas, it can be a handy (or painful) momentary problem. The grenades are usually used to cut off comms or kill wireless connectivity for high-tech toys, and riggers and hackers hate these things when they’re rocking full VR or a rigger just gave his drone a command he wants to change.

- Technos hate these even more. The momentary separation from the Matrix can be debilitating.
- Clockwork

COS GRENADE RULES

The grenade interrupts all Matrix access (and with it, all wireless bonuses) for all devices within the affected area. Anyone using a commlink, cyberdeck, or RCC in full VR mode immediately suffers dumpshock (see p. 229, SR5). Drones separated from their RCC continue to follow their last commands until they reconnect.

A device that loses its Matrix connection alerts its user that it will shut down and reboot automatically at the end of the present Combat Turn. The user may prevent it from doing so with a Simple Action (or a Free Action via DNI). Multiple devices require separate actions unless they are slaved to the same master device. Devices that reboot come back online at the end of the following Combat Turn.

Technomancers in range must resist 10S damage and are temporarily severed from the Matrix.

GRENADE	AVAIL	COST
CoS	10R	500¥

DOUSER

I am an advocate for the advancement of beneficial (especially to my credstick) technology. That said, I will openly admit that I take issue with some of the drek coming out of Evo, because I know full well how they got it. On the backs of Monad slaves that somehow bought into Evo’s “meta-friendly” image and decided it was better to work for them than to escape the shackles of this world and shoot off into the stars.

Okay, maybe I’m a little jealous, but Evo has been working their big brains and using them to develop tech that is leaps and bounds ahead of competitors (until they get stolen) for nothing more than a prison within their own corp.

Sorry for the sidetrack. Douster is all sorts of scary. The basic adverts for the grenade seem pretty mundane. Toss it out and let it wear down the protective code of all local hardware. Slightly more technical, it does a focused attack on the Firewall of every device in the area of effect. How it does this is the truly scary part. Monads aren’t afraid of nanites (unless it’s the frag-all crazy ones that zipped up Boston), so they have no problem designing a few new bits of tech that utilize some of their own groupthink-designed nanotech. That’s the Douster design.

When the grenade explodes, it releases a vapor cloud over a narrow area. This vapor cloud isn’t just heated water vapor; it also contains a massive volume of nanites. The nanites merge processing power and programming for a single purpose. No, not overwriting your brain—stop living in the past. In the case of Douster, the nanites ravage the Firewall. Get it? FIREwall. Douster. So funny. The nanite programming can shred the defense systems of low-end electronics in a blink, leaving them vulnerable to attack, and it softens even the highest-end systems.

Best thing is, they don’t discriminate, and they hit every bit of tech in range. Only thing that can keep you safe, is a full shutdown. Even killing the wireless doesn’t stop them from landing on you and close enough to access via a touchlink style system.

- Not to go off-topic, but I know Mr. Johnsons in at least twelve different cities who are running Evo contracts at an alarming rate. The money is there if you’re up for the variety of new challenges you may face.
- Fianchetto



- Biggest issue I've come across with current ops on EVO: overlap. Teams running into other teams going after R&D in the same facility.
- Mika
- Hackers running Wrapper programs to look like locals are getting into scuffles with fellow runners and bringing IC down on everyone's head. It's ugly out there, kiddos.
- Bull

DUMDUM

While attacking the Firewall of a system was a great first step and seemed logical, the techs at EVO then went a step further. Why not ignore the protection protocols completely and instead flood the processing system with pointless functions to the point of overload and shut down devices that way?

DumDum goes after the Data Processing system instead of the Firewall software. Instead of leaving a device defenseless or forcing it to shut down, the cloud of DumDum nanites gobs up the system with junk processes and prevents the system from performing normal operations. There is no shutdown warning with DumDum, just a sudden inability to complete any kind of task. A successful barrage will make even voice or text transmission impossible, and the only report you get is the “thinking” icon of your particular device. Transys devices are particularly humorous, as the little fighting knight slows down and moves in a herky-jerky slow motion. A full shutdown/reboot gets the system clean, but it has to be a hard shutdown and restart (a.k.a. holding down the power button), because the reboot process is slowed by the attack as well. Devious little system they developed here. No real warning until you need to do something.

- I can't decide whether the use of weaponized nanites so soon after the events of Albuquerque and Boston is a sign that we have way too short a memory, that we're extremely resilient when it comes to tech, or that we're just that fragging stupid.
- Bull
- The last option. Definitely!
- Slamm-O!
- Widespread understanding of the truth of CFD just isn't there. Every corp puts enough spin to make its citizens feel safe, and most of the major nations of the world get

DOUSER RULES

The nanites burst out over a five-meter-radius sphere. The nanites make a single Rating x 2 [Rating] (Firewall) Test. Hits over the threshold decrease the Firewall rating of all devices in the area at a rate of -1 per net hit. Cyberware is also targeted by the attack.

When a device's Firewall is reduced to zero, it alerts its user that its protection software has been compromised, and that it will shut down and reboot automatically at the end of the present Combat Turn. The user may prevent a device from shutting down with a Simple Action (or a Free Action via DNI). Multiple devices require separate actions unless they are all slaved to the same master device.

Firewalls remain at their lowered state until rebooted. Devices that shut down and reboot come back online at the end of the following Combat Turn with their Firewalls fully restored.

Gamemaster note: This attack could take a lot of record-keeping time. To simplify the process, have the character take note of the final hits total and only worry about it if they try to use a piece of gear or the piece of gear gets digitally attacked. The number of hits divided by two can act as a simple distraction modifier for the Combat Turn as their AR is flooded with warnings.

The maximum rating of the Douser grenade is 10.

GRENADE	AVAIL	COST
Douser	(Rating x 2)F	Rating x 50¥

their news from corp feeds.

- Snopes
- Blaming nanites for CFD is like blaming a gun for shooting someone. They were a tool to complete a task. I won't say it could never happen again, but I am saying that the number of jobs getting offered by AIs to go free their fellows from some dark and well-guarded places is high.
- Ma'fan

ACCESSORIES AND TOYS

This is kind of my catch-all category for things that don't fit elsewhere. It's a bit of a hodge-podge, but it's good stuff.

FACELESS

This could have gone in the *Cutting Aces* file, as it's perfect for those who prefer not to be identified.



DUMDUM RULES

The nanites burst out over a five-meter-radius sphere. The nanites make a single Rating x 2 [Rating] (Firewall) Test. Hits over the threshold decrease the Data Processing rating of all devices in the area at a rate of -1 per net hit. Cyberware is also targeted by the attack.

Reducing the Data Processing of a device to zero means the system is busy and can't perform even the simplest processes for the user. Wireless bonuses are negated, comms fail, eyeware freezes on a frame, earware rings, wired reflexes stop functioning, etc. The system issues no warning to the user; it just stops processing data. Devices cannot reboot automatically with their Data Processing reduced to zero; each one must be shut down and rebooted manually with a Simple Action.

Data Processing remains at its lowered state until the device is rebooted. Devices that shut down and reboot come back online at the end of the following Combat Turn with their Data Processing attributes fully restored.

Gamemaster note: This attack could take a lot of record-keeping time. To simplify the process, have the character take note of the final hits total and only worry about it if they try to use a piece of gear, at which time check if it is unresponsive.

GRENADE	AVAIL	COST
DumDum	(Rating x 2)R	Rating x 50¥

The style varies to suit the user, but the effect is all the same. Bought in the form of an accessory (lapel pin, earrings, ring, cuff link, etc.), an embedded micro-device runs a constant series of local mini-hacks on nearby devices that rewrites your face on any Matrix connected or wireless recording device that captures it within range. The base device has several levels and options to enhance the range and software capabilities along with how it alters the facial footage, as it can blur the loaded face, overlay a generic face, or overlay a specific face.

I've actually stocked up on these, as I think everyone should use them. Well, that and the megacorps are not happy with how well they work and have been cracking down on production and

distribution, trying to keep them all for their own company suits. They don't work against everything but usually enough to keep you anonymous, and the things they don't work on are usually overlooked by the authorities.

- Every runner in the world needs to use these things. They're killer high-end tech, with the price tag to match, but these babies are bringing the shadow back to shadowrunning.
- Mika
- I know a fellow who is quite protective of his anonymity and used both a nanopaste mask and the Faceless lapel pin in the form of a rose to make sure no one can be sure it's him passing through security.
- Thorn
- A rose, eh? Don't know who that could be. Is it an Irish rose perhaps?
- Slamm-0!
- It's advice without pretension, Slammy. You should try it sometime.
- Thorn
- Seriously, talking about someone else when we all know it's you is pretty much the definition of pretentious.
- Slamm-0!
- Don't sell the authorities short on getting to those devices that actually snag your face. That hardwired convenience store cam may have gotten you, but the cash they slipped the owner, or the beating they gave him, just make the intel less useful in a court of law.
- Black Knight
- Like most of us will ever see a court of law.
- Balladeer

BOOSTER CLOUD

Another creation using nanites coming out of Evo's labs, but also being produced by Saeder-Krupp and Renraku. Which means we know who contracted some jobs against Evo. Anyway, the booster cloud is a nanite-filled aerosol can about the size of a can of pepperpunch. When dispensed, the nanites are preprogrammed to enhance a specific Matrix function. The cans were originally meant as an in-the-field booster for corporate deckers but have slipped onto the streets, like most super-handy tools.

Data spike cans are some of the most com-



FACELESS RULES

The Faceless device makes a Rating x 2 [Rating] (Firewall + 2) Test instead of the standard Edit File Test. Success means the device is operating correctly and properly overwriting the data. It does not have to make another test until it comes into range of another device. A failure could mean the effort is obvious and glitchy, or that it fails completely. A glitch could put the face on the wrong person.

If used against cybereyes or on a monitored system, the blurred face is obvious unless blending into a crowd. They still

can't see the real face, but they know something is going on.

Maximum rating for the system is 10.

ITEM	AVAIL	COST
Faceless	(Rating x 2)F	Rating x 500¥
Generic face	+2	+1,000¥
Specific face	+4	+5,000¥

mon booster clouds but also the most expensive, as GOD is using them to help in hunting Matrix anomalies. The streets, with their innate creativity, have developed more expansive uses, which brings along an associated markup.

Just so it's clear, these are released in the real, physical world, and the cloud isn't very large. You can't move very far while utilizing it. If you're fully immersed, you'll need a remote-release system. If anyone else moves into the cloud, you both get to use it. That means either the opposition can steal a little juice, or you can work together with several pals and get "boosted" together.

- These things are great for pre-planned gigs or a little boost on the fly. Toughest trick is getting them past security, but I know a secondary-market guy who does custom casings. Spray paint, inhalers, perfume bottles—if it comes with a spray nozzle, he can probably fit a booster into it.
- Slamm-0!

MULTIPROGRAM OPERATING SYSTEM

If it works in a piece of cyber, someone usually figures out how to make it work outside said piece of cyber. Much like the internal system of the datajack plus (see below), the multiprogram operating system (MOS) allows for the addition and operation of a plethora of additional programs. Without the additional computing power that the d-plus pulls from the brain, the MOS requires an extensive series of processors, pushing its cost up and even beyond the d-plus, but hey, it doesn't require a hole in your skull. (I know, not a concern, but I've already caught tons of flack for the cost!) The system comes with a datacord and insulated storage case as it's too large to mount

BOOSTER CLOUD RULES

A Simple Action disperses a half can, a Complex Action disperses the whole can. Half the can offers a +1 dice pool modifier, +1 to the applicable limit; the whole can offers a +2 dice pool modifier, +1 to the applicable limit. The quantity released determines the bonus to a single type of Matrix Action, for up to 3 Combat Turns depending on the local air movement (winds, spells, ventilation systems, etc.).

TYPE	AVAIL	COST
Brute Force	6R	250¥
Control Device	6R	200¥
Crack File	6R	150¥
Crash Program	6R	150¥
Data Spike	8R	300¥
Edit File	—	150¥
Erase Mark	6R	150¥
Hack on the Fly	6R	250¥
Hide	6R	150¥
Jam Signals	6R	150¥
Matrix Perception	—	100¥
Reboot Device	6R	250¥
Snoop	6R	200¥
Spoof Command	6R	250¥
Trace Icon	8R	200¥
Custom Case	6	200¥





efficiently as an accessory. Be warned, the case serves an actual purpose as the device produces a bit of excess heat.

MOS RULES

The MOS can run a number of programs equal to its rating. Maximum rating is 4. The MOS must be connected to a cyberdeck or commlink via its datacord, which is only half a meter long.

The device runs hot. If the user carries it on their person, it causes (Rating)S damage each Combat Turn when in use and in its case. The damage is (Rating x 2)S when outside the container and outside clothing, but if exposed to bare skin the damage is Physical. Fire Protection works in resisting the damage as long as the armor is between the wearer and the box. It can be used safely if placed on a stable, non-flammable surface.

- Don't let this thing get near you deck when it's operating. The processors can barely cool themselves, and the box gets hot enough to burn flesh. Use the datacord and insulated box.
- Pistons
- I don't recommend it, but I've used the box as a painful distraction before by running it while someone was trying to procure it from me during a field test.
- Slamm-0!
- You field-tested these? How hot do they run?
- Glitch
- Took a top-of-the-line model on a rural op and cooked an egg on it. No joke. It wasn't necessary—just wanted to see if it would work.
- Slamm-0!

ITEM	AVAIL	COST
MOS	6	Rating x 4,000¥



- You had a real egg and you cooked it on your tech toy?
- /dev/grrrl
- I had a lot of eggs as I was hiding out in a henhouse at the time. I ate so many, I'm kind of over them.
- Slamm-0!

BOOSTER CHIPS

While MCT was putting technomancers through the black site torture program, Evo was using some of their newest assets to infiltrate and steal the research data MCT was gathering. Using biological readings from a myriad of tests, Evo managed to develop a simchip-based protocol that enhances certain aspects of a technomancer's living persona through short bursts of BTL-level feeds. As you would expect, there's a small risk of addiction due to these feeds, but the addiction numbers were lower in test subjects, likely due to the focused nature and purpose of the chips. The chips come in four varieties, one for each aspect of the living persona, with basic grades of the chips available commercially. There are also some seriously amped-up versions on the streets that have cooler names thanks to their shady dealers. Overuse and mixing the chips can cause issues, but a troublesome headache is better than getting brainfried by IC.

The big tech jump here is a slotless BTL. The chips have a series of pins with a mix of sensors and stimulators. When applied to the cranial region, the pins transmit the signal directly to the brain, like a single-spot trode. The chips need bare skin, meaning many technomancers who use them keep a patch of their scalp shaved rather than sticking the chips on their foreheads.

- If you can look past the source of the initial research and the forces used to steal it, these chips are a handy little tool for technomancers everywhere. The headache claim might be brushing problems under the carpet, but I've found it's more about usage at that point. If you run a bunch of those street chips together, you're asking for a hurting, but the commercial boosters aren't terrible.
- Netcat
- Be careful about picking up the commercial ones at your local Stuffer Shack in areas where technomancers aren't wanted. You may not have a problem, or you may walk out the door to a group of thugs that got tipped off by the clerk. Not to mention the sales records getting sold or stolen and ending up in the hands of any number of hatred-filled policlubs.
- Respec

- I know Clockwork won't mention it, despite his involvement, but a number of runner teams around the country have been contracted to swap real booster chips for fakes in stores. The grapevine claims that some have had their pins coated with DMSO and an unpleasant cocktail, but most just claim they don't work. Care to comment, Clockwork?
- Slamm-0!
- Claims are bogus. Between Evo feeding the world a line of garbage about these and other corps jumping on the bandwagon with chemical-laced brain boosters and pitching the same effect, you're all getting fed a load of garbage. I deal with my problems head on, not by poisoning them on the sly.
- Clockwork
- We all know better than to believe that!
- Netcat

BOOSTER CHIP RULES

The rating of the booster chip adds directly to both the living persona attribute to which it is connected, increasing the limit, and to all dice pools where that attribute is involved. The modifier is never applied twice to the same test—for example, in a Matrix Defense Test that already involves the Firewall attribute, the dice pool increase for the related test would not also be applied, since Firewall was already increased. The chip requires a Simple Action to attach, and it runs for 2 Combat Turns. At the end of the chip's duration, the chip inflicts (Rating) S damage, resisted by Body. For each other chip simultaneously in use, that damage increases by 2, meaning a technomancer running a series of Rating 4 chips would need to resist 10S, 8S, 6S, and 4S as their durations ended.

The chips have an Addiction Rating equal to the total rating in use, and a threshold of (2 + 1 for every additional chip in use).

TYPE	RATING	AVAIL	COST
Attack Booster	1-2	—	Rating x 50¥
Sleaze Booster	1-2	—	Rating x 50¥
Data Processing Booster	1-2	—	Rating x 50¥
Firewall Booster	1-2	—	Rating x 50¥
Armor Defeating	3-4	(Rating x 4)R	Rating x 250¥
Slick Willy	3-4	(Rating x 4)R	Rating x 250¥
Data Dynamo	3-4	(Rating x 4)R	Rating x 250¥
Fortified	3-4	(Rating x 4)R	Rating x 250¥

TRODE PATCH

Are you sick of hiding your trodes in your hats or having that gelly goop getting stuck in your hair? Well, then, it's time to rejoice with MCT's latest design for virtual access with minimal hassle. The full trode rig will soon be a relic of the past, and getting a hole drilled in your skull for a datajack just won't be necessary anymore with the ultra-sleek trode patch.

About the size of an old-fashioned quarter, or about 2.5 centimeters in diameter for those unfamiliar with ancient UCAS coins, the trode patch allows the same level of DNI interface as a full rig, but rather than needing a full net or headband of them, it's a single small piece. It requires direct skin contact near the brain, so a small patch of bare skin on the cranium is needed, but that's better than a hole in the head any day. Many models even come with a custom exterior that can match your hair, or you can get one with any number of logos or designs.

ITEM	RATING	AVAIL	COST
Trode Patch	4	4	1,250¥
Patch Cover	—	—	250¥

CYBERDECKS

With time in this new Matrix—and if rumors are true, another security upgrade is on the way—cyberdecks have been getting some alterations to their design and basic functions. The dongle market is letting a lot of would-be hackers play a

N-SERIES RULES

Ordering a custom setup costs the amounts below. Deck Rating in this case determines the maximum rating of any other attribute. As described above, the N-series can only store and run a single program, regardless of their rating. Once set, the attributes for any given cyberdeck cannot be changed.

ATTRIBUTE	AVAIL	COST
Deck Rating	(Deck Rating x 2)R	Rating x 5,000¥
Attack	—	Rating^3 x 500¥
Sleaze	—	Rating^2 x 500¥
Data Processing	—	Rating^2 x 500¥
Firewall	—	Rating^3 x 500¥

dangerous game with half-assed equipment and a cheap lease on life. With several of the trainer decks and locked design decks getting tons of love these days, a few other cyberdeck firms have been getting into the fray and offering alternative designs and elements that ease costs but leave any users a step or two behind the true corporate-raider-level decks. Most of the major cyberdeck makers have models of their own, but I'd like to put a little focus on Fuchi.

FUCHI CYBER-N SERIES

Using the branding power of Fuchi and not letting the collapse of another Villiers project get them down, the lab rats have brought you the N-series. With this series, you design the system you want, and that's what you get—at all times. The N-series follows in the locked-decks market, but when purchased new allows custom design for the system settings. You get to choose what you're getting stuck with. To add an extra bit of rigidity, the N-Series can only run one program at a time. Period.

- Great for those just out to do the job. They lack any kind of flexibility. Even the other locked designs have some program variability for tough spots. If you run with the N (or run with a decker with one), know that versatility is not on the menu.
- Pistons

FUCHI CYBER-EX SERIES

Similar in design to the N-series, the Ex-series offers the same custom system design but instead of no processors to run programs, it offers a unique program sub-processor that allows a greater number of programs to be run. Despite the steep price tag, the programs aren't included, but each system has enough memory to store twice the number it can run at any given time for those who want options. Purchasers appreciate the extra program capacity, even if it means sacrificing some of the capabilities of the deck itself. Programs aren't included, despite the steep price tag, but the system has enough storage memory to hold as many as you can afford.

- I like the thought here, and the heavy program load makes up a little for the lack of versatility. Then again, it also allows for a very focused device with some programs around to protect you long enough to run if things go south.
- Pistons



SECURITY DECKS

Even though cyberdecks were supposedly intended only for cyber-security specialists, we knew full well the moment they hit the market, they'd be finding their way into the hands of hackers in no time, often straight from the same corps that designed them just for their security specialists. To counter these events yet again, they've developed another branch of decks, designed with a locked chipset, and a specific setup that best suits their purposes. The system designs include virtually no Sleaze protocols and a generally low-grade set of processors, but they offer potential with their various levels of Firewall hardware, along with attack systems and a stringent set of program allotments that are pre-loaded and can't be changed without altering the hardware of the deck.

- Careful trying to tweak the program complement on these. The hardware inside is specifically designed to prevent tampering. Plenty of deckers have turned their expensive tech into shiny junk by trying to swap out program blocks and missing a pin or two.
- /dev/grrl

HUNTER DECKS

Similar to security decks, hunter decks are utilized by a unique class of newly developing electronic specialists known as E-Hunters. These cyber-security specialists are taking their work

EX-SERIES RULES

Ordering a custom setup costs the amounts listed below. For the Ex-series, a deck's Device Rating determines the maximum rating of every other attribute, but it can run a number of programs equal to the Device Rating plus two.

ATTRIBUTE	COST	AVAIL
Deck Rating	(Deck Rating x 2)R	Rating x 10,000¥
Attack	—	Rating^3 x 500¥
Sleaze	—	Rating^2 x 500¥
Data Processing	—	Rating^2 x 500¥
Firewall	(Rating x 4)R	Rating^3 x 500¥

on the offensive, focused on the new technosapients and e-critters (mostly the former, though the latter occasionally find themselves in similar habitats). These decks focus on one thing and one thing only: killing. Or more accurately, derezzing AIs and other purely electronic entities. They have their specific limitations and protections but are designed to be of limited use for regular hacking, and they are exemplary at the dangerous job of e-hunting, including being devoid of a sim-inhibitor, meaning they run on hot-sim all the time. Makes you fast and ready to rock and roll at any moment, but it also means you had better be at

SECURITY DECK RULES

All security decks come with special anti-tamper systems that brick the device if programs are changed. Changing a program block requires a Logic + Hardware [Mental] (Device Rating x 2, 1 hour) Extended Test. If any roll does not achieve any hits, the deck is bricked.

MODEL	RATING	ATTACK	SLEAZE	DATA PROC.	FIREWALL	AVAIL	COST
Guard	2	3	1	2	4	3R	39,000¥
Programs: Encryption							
Shield	4	4	1	3	5	6R	98,000¥
Programs: Encryption, Shell							
Fortress	6	6	1	5	8	9R	377,000¥
Programs: Encryption, Shell, Armor							
Great Wall	8	8	1	6	10	12R	774,000¥
Programs: Encryption, Shell, Armor, Biofeedback Filter							



HUNTER DECK RULES

Each model comes with the listed programs preloaded. All Hunter-series models only allow programs that aid in Attack- and Firewall-based actions and attributes.

MODEL	RATING	ATTACK	SLEAZE	DATA PROC.	FIREWALL	AVAIL	COST
Fox	2	4	1	3	4	4R	68,500¥
Programs: Track, Shell, Hammer							
Wolf	4	5	1	4	5	8R	133,000¥
Programs: Track, Shell, Hammer, Decryption							
Tiger	6	8	1	6	8	12R	530,000¥
Programs: Track, Shell, Hammer, Decryption, Hammer							
Shark	8	10	1	8	10	16R	1,032,000¥
Programs: Track, Shell, Hammer, Decryption, Hammer, Mugger, Fork							

the top of your game or the things you're hunting are gonna derezz you. All Hunter-series decks come with a set of preloaded programs. These can be changed out, but the designers only allowed the system to load programs useful to e-hunting to prevent the decks being misused.

- These are dangerous, plain and simple. They offer a lot of hitting power, solid protection, and no chance of sleazing your way out of trouble. If you go out operating with one of these, there's only one way you'll be dealing with your problems. Directly.
- /dev/grrl

AZTECHNOLOGY SHADOW WARRIOR

Building on the success of the Microtronica Azteca 200, Aztechnology has produced an affordable deck that caters to deckers who don't want to be seen.

Exactly how Aztechnology optimized a deck for stealth in this way is a puzzle—they may have applied some of their research into technomancers, or they may have some insight, back door, or (most likely) leverage on the Grid Overwatch Division. Either way, they may have an advantage in the Matrix for a while, until their competitors catch up.

EVO SUBLIME

Only available as an implanted deck, the Evo Sublime takes transhumanism to the next level by allowing VR hackers to take some limited actions in the physical world. Splitting attention across the Matrix and the meat world is distracting, and it requires significant concentration to perform actions outside VR.

- This is more dangerous than it seems. The mix of feeds and poor control make almost any activity dangerous. Beware when trying to use this for more than just a little self-preservation by yanking your cord.
- Glitch

FAIRLIGHT DESTINY BLADE

Fairlight has long been a leader in cutting-edge electronics, but their Excalibur range has been out

SHADOW WARRIOR RULES

This deck adds +1 limit for Matrix Sleaze actions, and a +1 to the Sleaze attribute when that is configured to be the highest attribute.

EVO SUBLIME RULES

When jacked in using VR, the decker faces challenges performing actions outside the Matrix. Any non-Matrix actions suffer a -10 dice pool modifier and -3 limit reduction (to a minimum of 1). It's just enough control to pull out a cable to a physical machine that you are link-locked into, or fire wildly into melee.



of reach of any but the wealthiest deckers. In an effort to broaden their market while still appealing to the elite, Fairlight has launched the Destiny Blade. This is an excellent all-around deck that works harder and faster in combat. Marketing so far has been heavily favoring elite corporate deckers and high-profile mercenaries.

AZTECHNOLOGY DEFENDER

Aztechnology is no stranger to cybercombat and conflict in the Matrix. The Aztechnology Defender is intended to address a specific shortcoming, which was that too many Aztechnology deckers were dying, and it was starting to become expensive to train replacements. Unwilling to accept the performance hits of cold-sim or AR combat, Aztechnology instead wired in a few safeguards to make Matrix damage more survivable, without going so far as to slow down the deck.

KITBASHED SLEEPER

The horrific tortures endured by technomancers over the last decade have borne fruit for megacorporations, as arcane knowledge has allowed these unscrupulous conglomerates to milk every last bit of performance out of their devices and use the Resonance to squeeze out more profit. Given that technomancers can make formidable hackers, it is no surprise that rescued technomancers take piles of paydata with them when they exit the building. A group of white knights purloined some paydata and turned some abstract research into concrete fabrication plans. These plans allowed the technomancers to buy off-the-shelf parts and kit-bash them into a viable working deck that has just a little piece of Resonance within it. This spark allows a technomancer to use their Resonance abilities through this deck.

CYBERDECKS

CYBERDECK	RATING	ATTRIBUTE ARRAY	PROGRAMS	AVAIL	COST
Shadow Warrior	3	6 5 4 3	3	10R	225,000¥
Sublime	4	7 6 5 5	4	12R	375,000¥
Destiny Blade	4	7 6 5 5	4	12R	400,000¥
Defender	5	8 7 5 5	5	14R	560,000¥
Sleeper	4	7 5 5 4	4	14F	375,000¥

DESTINY BLADE RULES

This deck provides a +1 limit for tests using the Cybercombat skill, and +1 to the Attack attribute when it is configured to be the highest attribute.

AZTECHNOLOGY DEFENDER RULES

The Aztechnology Defender reduces all damage on the Matrix by one box each time the user is damaged, to a minimum of 1. Dumpshock damage is reduced by 2, to a minimum of 1. The user of the Defender must adjust their Initiative Score by -2 immediately after rolling it.

KITBASHED SLEEPER RULES

A technomancer using this deck can complete Resonance actions, including compiling, threading, and registering. Fading is resisted with Resonance + Firewall. Any fading not resisted causes a non-repairable box of Matrix damage; once the 10 boxes of the device are filled, it is irreparably broken. Any fading absorbed by the Sleeper does not affect the technomancer.

The deck is not part of the Resonance, and it cannot survive the fading that a living persona can handle. These decks are hand-made, and therefore hard to come by, although demand is slowly growing.

CRY WOLF PROGRAM

Sick of GOD crashing your party just when things are getting good? Well then, you need to load up Cry Wolf and send those faceless suits on a wild goose chase. At least for awhile.



+ - x



No anti-tracking software is perfect, but when GOD comes down on some other poor defenseless (or not) Matrix user, it may take them a few ticks to realize they aren't in the right place. When they realize what happened, you had best already made yourself scarce, because this program has already been qualified as a felonious act on par with murder.

And don't get caught with this loaded on your deck. There is no amount of fake licensing that will get you clear of the trouble this program brings.

As for the brass tacks, this program creates a secondary point for the location of your hack. You don't pick the location; instead, it's randomized by the program. The purpose is to bring trouble down on someone else if GOD decides to visit or send forces. Once the fake location has been targeted, there's enough of a trail to lead to the real location—GOD won't stay fooled for long, but it can be long enough to get out of Dodge before they come after you.

The complexity of the coding and nature of the program gives it a major limitation: It only works once. After GOD has been fooled by a particular Cry Wolf program, they remember that particular program's randomizer signature, and the next time they see it, they'll skip right over the fake location. If you plan to use one of these, please pour one out for the Matrix souls that cashed in all their chips slowing up GOD for you.

- This program is straight trash-hacker software. If you can't be bothered to run a baby monitor and know when you're in trouble and instead would rather bring GOD down on some poor unsuspecting slob, don't ever let me find out. I will rain down a hell far worse than the simple KO and pickup of GOD.
- Glitch
- Yeah, this. I appreciate people knowing this is out there, but seriously, if you want any hacker cred, don't use this



CRY WOLF RULES

Convergence is what happens when the Overwatch score reaches its tipping point (see **Overwatch Score and Convergence**, p. 231, SR5). But when a decker uses a Cry Wolf program, GOD converges on another persona instead—a completely random persona, somewhere else on the same grid. When the program detects a Convergence event at the false target, it warns the decker.

GOD could realize their error instantly if they are brought down on some random commlink user, or it may take a moment if the Cry Wolf program randomly selects another decker. If GOD is aware that they have been misled, they can Converge on the real hacker within another 1D6 Combat Turns. That same roll can occur after they dispatch and deal with a decker pinpointed by Cry Wolf program.

fragging cheatware. I don't often agree with the corps, but making this thing equivalent to murder is legit in my book.

- Bull
- Thank you, white hats. For all of you real hackers out there, use this to your heart's content. Pulling punches isn't our job, and as long as GOD is going to keep coming down and acting with impunity, we can make a few cases to prove how recklessly those slitches play the game. They don't care if they rain down black hammers like it's monsoon season, and I'm not taking the blame for that. This program lets you skip eyeballing your baby monitor every half second and lets you know just when the dreck hits the fan. If it never hits, it never hits, and that's the goal anyway, but if we've gotta play by GOD's rules, frag them if I'm playing anywhere close to nice, because they sure as frag don't.
- ICPK
- You can think that all you want. But when you are keeping a low profile and some two-bit hacker uses a Cry Wolf and you're the one they bring the brimstone down on, you'll change your tune.
- Respec
- Seriously? Looking at the user data on an average grid like Emerald City and knowing the general runner community of Seattle, I can calculate the odds of this program hitting a fellow hacker, be they unassuming decker or a random techno, at about 100,000 to 1. Seeing as the number of deckers in Seattle who might use this program is also relatively low—well, you can take your "it happened to a friend of a friend" tale and go tell it to the gullible. My efforts are worth more than any average sheeple hack any day.
- ICPK
- Might not necessarily agree, but more varying viewpoints are nice. Glad you're expanding access a little, guys.
- /dev/grrl

CYBERWARE AND BIOWARE

It's not a lot, but what I have lined up is high-quality. This is bleeding edge and I've got the docs on my rolodex app to make installs happen in almost every major sprawl around the globe.

DATAJACK PLUS

Every corp is trying to innovate a little to get a bit more of the market share. And then another corp takes their idea, re-labels it, and eventually, every

corp has an offering, too, with almost the exact same features. The datajack plus is the latest in these efforts to get everyone to upgrade or buy the newest tech. Its basic functionality is identical to a standard datajack, offering a DNI link to devices and a filter to handle some of the local interference, but the Plus offers a small cache of memory and a processor system that links up with your commlink (or cyberdeck) with the ability to run programs. The d-plus system comes in a variety of processor speeds and cache sizes to offer a variety of options for the executive with an eye on the top spot or the electronic security specialist that needs an edge because the shadows keep getting faster and more deadly.

- The jack-plus is becoming the crutch of wealthy wannabes, rather than the next step in the hacker evolution. Too many punks trying to use the myriad of programs instead of a quality deck or genuine skills.
- Respec
- That's one point of view. Using these advances isn't a crutch for everyone who gets the plus. Some people just want to have that extra edge, and the plus offers a whole porcupine worth of edges.
- Pistons

DATAJACK PLUS RULES

The datajack plus offers space for a number of Common and Hacking programs. When connected to a commlink or cyberdeck, the datajack plus can run a number of Common and Hacking programs equal to its rating. The price includes [Rating] free programs from the dealer that come preloaded (gamemaster's choice) but these can be changed. Maximum rating is 3.

ESS	AVAIL	COST
0.15	4	Rating x 3,500¥



ENHANCED AUGMENTED REALITY REFLEX SYSTEM

Can you hear me? Maybe you need a nice set of EARRS?! I'm so funny. The EARRS system is a unique blend of meat and Matrix, designed to allow faster Matrix activity without the need to fully immerse yourself in the virtual realm. Functioning as a bridge between your central nervous system and the Augmented Reality Matrix around you, EARRS allow you to process Matrix input at Matrix speeds while also letting you respond to it via physical actions combined with DNI and without the total nervous override of full ASIST.

These were field-tested by several special-operations groups, and most came back with rave reviews. They saw their operator's ability to interact with both worlds at once, a far greater option than being restricted to slow AR interaction or slumping and being hauled by the team while they went full-VR to deal with electronic hazards.

- Can't say I know anyone with a system like this, but it can't be easy to operate between the two realms. Even operating in an intense spam-zone can make the real world impossible to interact with—I can't imagine a system that tries to merge the two worlds.
- Balladeer

EARRS RULES

The EARRS implant allows users to roll their Matrix Initiative in a Physical encounter but limits the actions that can be performed. While running the EARRS implant, the user can move normally and perceive events in the physical world through their standard senses, but all Physical and Social Skill actions face a -10 dice pool modifier due to the system's confusion of physical and Matrix input. Matrix Actions can be performed as normal.

ESS	AVAIL	COST
0.75	10R	30,000¥

CRANIAL SHIELD

I'm only including this as a favor to a friend who wants people to know they exist. No one in their right mind would ever intentionally get one in-

stalled. The system is a series of emitters implanted into the skull. The emitters throw off a low-level interference signal that inhibits wireless connections between devices in the cranium and outside. A bypass, like a datajack, can be used for access, but all wireless connections fail. The system was supposedly designed to protect couriers from getting their headware hacked, but the existence of datalocks and the ability to shut down wireless capability made plenty of skeptics. Digging around for the original design traced the whole thing back to MCT, and some additional specs showed that the system also blocks technomancers from accessing the Matrix. So now we know why they made it.

- There is no reason for this to exist. This is some of the most deplorable tech I have seen since cortex bombs. There are *no* good uses for this!
- Netcat
- I'll probably catch flak for this, but here goes. The market for this implant is parents of technomancer kids. I'm not a proponent of this by any means, but it's hard being a teenager and a technomancer. Or even being an adult and a technomancer. This implant is marketed as a way to shut off the overwhelming stream of signals constantly battering a young technomancer. It's marketing, I know, and there are so many ways to protect them without cutting off access to a natural talent, but a lot of parents aren't technomancers themselves and don't understand. They just see it as something that is hurting their child, and they look to this as a permanent solution.
- /dev/grrl
- Those parents don't deserve those kids.
- Netcat
- Here's a growing business for you: hacking clinics that offer this "treatment" and then snatching kids before surgery. The jobs vary in pay depending on the delivery target for the kid. Delivering kids to a hooder looking to help a young techno brings in low pay, while selling them to a corp or (sorry, Orange Queen) a dragon pays better. Looking into who you're working for is a good idea here, and before you go thinking about welching on the deal in order to keep a young technomancer out of the corp's hands, remember they're a person and will need to be taken care of. Not to mention the fact that most of them are already convinced by mom and dad that this is the best solution to help them with their condition.
- Fianchetto



ESS	AVAIL	COST
0.5	12	5,000¥

MCT BIOLINK

This is some drek, and we all know where the research came from, even though no one is ever going to admit it. The BioLink is best described as a wireless datajack. A small cluster of tissue is grown across a section of the midbrain. The tissue acts in a fashion similar to the same areas of the brain of a technomancer and allows the user to connect to wireless devices without the use of a datajack. It's what some call the first step in understanding and recreating the technomancer phenomenon, but anyone in the shadows with half a conscience knows this all came at the cost of hundreds if not thousands of technomancers.

Getting this implant is paying back into the pockets of a mega that has hunted and killed more innocent technomancers than GOD.

The bioware doesn't open the subject to the Resonance and doesn't offer a Matrix persona, but it does allow a direct feed of Matrix data to the brain and potential access to other Matrix-accessing devices like commlinks and cyberdecks via DNI but without any wires.

- Great. Now we can make freaks.
- Clockwork
- Already could. Isn't that how you got here?
- Respec
- The stealth hacking options here are the real advantage this allows. I'm as unhappy as the next person that the megacorps do all sorts of testing and even torture people to get their info, but to let those people die in vain seems a far worse offense. Better to arm ourselves with the tech and tools they discover and use it against them.
- /dev/grrl

ESS	AVAIL	COST
0.5	10	15,000¥

IC

Sometimes it's not just good to know what we're able to buy, but also what might be sliding onto the market to make your lives hell. I don't offer any kind of real sales figures here, as the corps that make this stuff code it all in house, and when

they sell it, we're talking corp-to-corp deals, which are not my area of expertise.

FLICKER

Megacorporations have been developing IC for a long time and have largely focused on lethal attacks or significant interference. Last year, NYPD, Inc. gained a non-lethal contract to protect several buildings in Boston, and they included cybersecurity as a part of that package. Unwilling to just dump a hacker, the boys in blue spent some money on non-lethal IC that also allows them to study your avatar. Almost as soon as the IC was developed, it was licensed to almost everyone on the Matrix.

FLICKER RULES

Attack: Host Rating x 2 [Attack] v. Logic + Firewall

Flicker link-locks you when it hits and puts a mark on you. If you have two marks on you, it disconnects you from the Matrix, dealing dumpshock damage if appropriate. Although you have been disconnected from the Matrix, your avatar doesn't disappear until you log back in using the same device, or after [Device Rating] rounds. It remains where you left it, unable to act, while other IC can attempt to trace your location or analyze your avatar.

SLEUTHER

With the development of Flicker providing a minor marketing boost, Lone Star began developing their own non-lethal IC. Instead of focusing on an intruder's avatar, Sleuther attempts to work out your habits and trackable characteristics from the trail your virtual presence leaves. The IC has had limited success in stopping hackers but has provided the contact details of many hackers that can be found—and possibly recruited—by the Star.

SLEUTHER RULES

Attack: Host Rating x 2 [Attack] v. Logic + Firewall

This IC puts a mark on you if it hits. Each mark provides a legitimate user with +2 dice on any Matrix Search actions or Matrix Perception tests involving you. It works by applying different behavioral algorithms and heuristics to try to work out what sort of person you are. This IC also installs tracker code into your avatar, enabling the IC to identify which grids and hosts your avatar visits after the mark lands. Marks from this IC may be removed normally.

BLUE GOO

Sometimes Matrix security designers want IC that is immediately threatening, stuff that will attack you as soon as it detects you with a level of force that would ruin your day. Other times, they want IC that is sneakier, stuff that might draw you into a fight, lead you to think you are doing well, only to blow up in your face when you think the battle's won. Security designers who want the latter effect want Blue Goo. This Wuxing creation hits back if it's hurt—the damage enters a quick feedback loop in the programming and is spit back out as a withering attack. This destroys the IC, but it will also do a number on the target. So if you think you see some IC that looks like a fat, juicy target that you can take out easily, be aware of what might happen as it goes down.

BLUE GOO RULES

Attack: Host Rating x 2 [Attack] v. Logic + Firewall

If an avatar successfully deals Matrix damage to this IC, it deactivates by exploding. Make a Host Rating x 2 [Attack] v. Logic + Firewall Opposed Test. If this attack hits, the avatar is link-locked by the host that launched the Blue Goo. The avatar must resist (Attack) DV, and it is marked by the host. The avatar must successfully Jack Out of the host to end the link-lock.

COMMLINKS AND RCC

Though commlinks are basic tech in the eyes of most, several of the megas have made some significant shifts and advancements in their development. Their efforts have worked as intended—I now have trouble deciding which one to buy for myself, because there are so many good options out there. Here are a few of the newer ones.

SHIAWASE CYBER-6 RCC

Shiawase has been focusing on large projects for a long time, and some of the things that supplement large building and security projects are

CYBER-6 RCC RULES

While a rigger is jumped into the drone, this deck provides all drones commanded from the console with +2 Initiative, and +1 limit on all tasks. If the rigger is dumped from the console, dumpshock damage is increased by 4.

drones. In order to build capital quickly, Shiawase has released one of their internal command consoles as a consumer product, skipping a lot of research and design, other than adding a rugged rubberized case. This model allows a rigger to process much more input from remotely controlled drones, at the cost of a closer, deeper neural connection.

SPINRAD GLOBAL SKIRMISHER RCC

When Spinrad and Global Sandstorm merged, the disruption to the company upended a lot of settled thinking. The SpinRad Global Skirmisher is one of the products produced as the company finds its feet again. Not the most powerful machine on the market, the Skirmisher has bet large on multiple processors and parallel inputs to the point where it is extremely good at processing some of the threat and input information from client drones.

Whether Spinrad Global fully develops this technology depends on where the internal chaos of the corporate restructure settles. This piece of technology could become the centerpiece of the Spinrad Global digital strategy, or it may become a footnote in the history of the company.

HORIZON FLOW COMMLINK

Horizon has the best sorting and sifting algorithms on the Matrix. In an attempt to leverage these, Horizon has produced the Flow, a commlink designed to help you navigate the depths of the Matrix faster and more accurately than a normal 'link can. As long as you are willing to enable the smart assistant, the Flow will download up-to-date algorithms from Horizon's servers and use those algorithms to seek the knowledge you are after.

- The Flow is meant to return “anonymous” usage statistics back to Horizon to fold back into the algorithm, but any decent decker can disable that in a variety of ways.
- Slamm-0!

WUXING FREQUENCY COMMLINK

Wuxing may not have been as deeply embroiled in the “technomancer controversy” as other megacorps, but they must have engaged in some experimentation, as shown by this commlink.



Wuxing issues these commlinks to guards in sensitive areas that may be targeted by technomancers.

The basic idea of the 'link is to gain enough information to try to differentiate technomancers from non-technomancers and have that show up as part of their icon. There are a lot of subtleties that go into the attempt to mark someone as a technomancer, so the device is generally not foolhardy enough to clearly rate someone as definitely a technomancer or definitely not a technomancer. Instead, it supplies interpretation of key bits of data as colors around the edge of virtual personas, leaving it to individual users to interpret what they think those colors mean. The devices work as designed, though the rarity of meeting a technomancer means that most guards don't bother to check every icon to see whether it might be one. Even if they checked regularly, the guards who are issued the device are generally not as technologically savvy as a decker, and they might well fail to interpret the colors correctly. Even so, if this technology becomes more widespread, it will get significantly harder for technomancers to hide.

SAEDER-KRUPP LAST CHANCE LINK

Saeder-Krupp has a decent share of corporate executives who have been involuntarily recruited by opposing corporations. Sometimes the targets of an extraction are more willing to leave than it might first appear, but in cases where it truly happens against the exec's will, Saeder-Krupp has provided the Last Chance Link.

Almost impossible to detect when inactive, the Last Chance Link is contained in a plastic sheet that sits in the nasal cavity. Usually turned off, it can be activated by means of a plastic strip that reaches down the throat. It's generally easy to conceal the activation as a sneeze or cough. Without much in the way of battery, the link has enough power for about an hour of activity, and it can be turned on and off to maintain contact. This gives captured executives a last chance to contact security.

SKIRMISHER RCC RULES

Drones that are commanded using the Control Device action from the Global Skirmisher gain a +2 dice pool modifier and +1 limit to their Gunnery and Perception Tests.

FLOW RULES

The Horizon Flow gains +2 limit and a +1 dice pool modifier to any Data Search Test made with the link.

FREQUENCY RULES

The commlink provides a +5 dice pool modifier and +2 Limit on Matrix Perception Tests to specifically identify an icon as a technomancer. It takes five net hits on a Matrix Perception Test (p. 241, SR5) to spot a technomancer.

LAST CHANCE LINK RULES

The Last Chance link has a concealability modifier of -8. The device can cause irritation if worn for more than a few weeks at a time, giving the gamemaster the option to impose distraction penalties on relevant tests.

I got the following from a friend we share. No, not Armand—Picador! She dropped me a little heads-up that gave me a solid line on a supplier, so I feel I can include her write-up over here and remind everyone that Estaban's Electronics Extravaganza has *all* your tech needs!

PI-TAC UPGRADES AND ACCESSORIES

POSTED BY: PICADOR

In modern warfare, many consider the Personal Integrated Tactical Network (PI-Tac) to be the

GEAR	RATING	DATA PROC.	FIREWALL	AVAIL	COST
Cyber-6RCC	5	5	5	12R	72,000¥
Skirmisher	4	5	5	8R	50,000¥
Last Chance	3	3	3	11	5,000¥
Frequency	4	4	4	10	3,500¥
Flow	5	5	5	12	4,000¥



pinnacle of battlefield communication and coordination, the culmination of years of research and development combined with rigorous field testing. While others think they're nothing more than overpriced, overcomplicated pieces of junk. However, despite your opinion on them, PI-TAC networks are a common sight on the battlefield—for those who can afford them.

But a new player has entered the tactical market and has caused a few waves. Calling themselves Pantheon Industries, they've released on the open market a series of upgrades specifically designed to work on all PI-Tac models, regardless of manufacturer (and much to many corporations' dismay). Full disclosure: My unit was given a few of these "tactical apps" to test. Can't say I'm one hundred percent sold on them, but so far (at least in simulations), they're proving quite useful. And from what I have been told by Pantheon reps, these are only the first in a possible new line of Matrix products.

- Okay, gotta ask the obvious: who, what, and why should I care?
- Stone
- Interestingly enough, my searches found next to nothing. What I did find says that the CEO, COO, CFO, and "lead R&D programmer" is one E.D. "Ed" Lockwood. His home address is in Detroit, but it's three years old and has no connections to a business. Lockwood is a former Ares tech who worked on the Excalibur, and from the information I found, he was basically one of several sacrificial lambs when the project went down the drekker. Other than that, nothing.
- Netcat
- So this guy is what, doing all this out of his garage or something?
- X-Prime
- Yeah, I think he is. Only way you can get their products is online.
- Netcat

PANTHEON INDUSTRIES PI-TAC "TACTICAL APPS"

Introduced by Pantheon Industries only six months ago, tactical apps (tac-apps) are meant to both enhance a PI-TAC and allow users to customize it for their specific needs or mission profile. They function like programs in a cyberdeck but are coded to operate exclusively in PI-Tac

units and cannot be used in cyberdecks that do not have a linked PI-Tac. All bonuses and benefits of a tac-app are cumulative with bonuses from a linked cyberdeck or RCC but are geared more toward decker usage.

A PI-Tac master unit can load a number of tac-apps equal to its rating plus two. Example: A level two PI-Tac can have four tac-apps loaded at any given time. Unlike cyberdecks and programs, it takes a Simple Action to unload a running tac-app and load a new one from storage.

CO-PILOT: MK I, II, AND III

One of the main features of Level III PI-Tacs is the network operator's ability to take limited emergency control of a linked-in vehicle or drone. The Co-Pilot series of tac-apps takes that function a step further. **Note:** For these apps to work properly, a PI-Tac operator must have admin access and a wireless link to all target vehicles and drones.

The **MK I** app is for Level III units and designed to give enhanced functions versus the standard benefits. With the MK I, an operator can operate the target vehicle or drone directly as if operating in cold-sim, assuming they have the necessary skill or skillsoft. However, control is less than optimal and inferior to a traditional rigger setup. Manufacturer warns that this program is best used only for emergencies or non-combat situations.

- Yeah. Since when do we actually listen to the manufacturer's warnings?
- Chainmaker
- This time we should. Based on my copy, it's definitely not meant to replace a rigger system. I tested a drone swarm with it to see how far I could push. And sure enough, in simulated combat the signal started to degrade and control went down the drekker because the code couldn't keep up. But desperate times ...
- Clockwork

The **MK II** allows Level I and II PI-Tacs to remotely control a target vehicle and/or drone as if they were a basic Level III unit. However, MK I and II apps are currently incompatible with each other.

- For being some kind of new "innovative" products, these tactical programs already seem to have some serious limitations.
- Cayman





- Like any new tech, you have to make it work. *Then* make it better.
- Rigger X
- Also, “currently” incompatible. Someday, the future will be now.
- Kane

The **MK III** allows a PI-Tac operator to directly assist a pilot in operating their vehicle’s secondary systems, such as sensors or communications, allowing the pilot to concentrate on primary tasks. In emergencies, the PI-Tac operator can assist should one or more pilots become incapacitated. In extreme cases, the MK III allows a PI-Tac operator to take emergency control should all pilots become incapacitated and/or the auto-pilot systems become inoperative.

- A chum in the 180th IAR is testing these for the regiment and says that when two people are operating the same vehicle or drone together and running the MK III, they get the odd sensation of being cramped and crowded.
- Turbo Bunny

DOOR GUNNER

Similar to the Co-Pilot, this app is specifically designed to give PI-Tac operators the ability to remotely operate powered weapon mounts (such as turrets) or launch weapons (such as missiles or rockets) on a linked vehicle. Because of the narrow focus of this program, there are no penalties associated with its use.

ECM-WARRIOR

Electronic warfare and electronic countermeasures continue to be mainstays of modern combat, so the ECM-Warrior tac-app is designed to give the PI-Tac operator some extra electronic ammo, whether defending against them or attacking with them.

PANTHEON INDUSTRIES

“CO-PILOT” MK I

AVAIL	COST
12R	400¥

Rules: Allows a Level III PI-Tac operator to control a target vehicle or drone as if by remote, using cold-sim. Additionally, all piloting skills have an automatic -2 penalty while operating the target vehicle in safe conditions, -3 in combat conditions.

PANTHEON INDUSTRIES

“CO-PILOT” MK II

AVAIL	COST
12R	400¥

Rules: Allows Level I and II operators to control drones as if in “captain’s chair mode.”

PANTHEON INDUSTRIES

“CO-PILOT” MK III

AVAIL	COST
12R	400¥

Rules: Allows operator to access vehicle’s secondary systems with no penalty and assist with Pilot tests at a -1 dice pool penalty. If using this program as sole pilot, penalty increases to -3.

PANTHEON INDUSTRIES

“DOOR GUNNER”

AVAIL	COST
12R	200¥

Rules: No penalties for use; linked weapon must have smartlink and secure wireless connection. Not for use with drones. Operator must have necessary skill or skillsoft.

PANTHEON INDUSTRIES

“ECM-WARRIOR”

AVAIL	COST
12R	200¥

Rules: This program provides a bonus of +3 for all Electronic Warfare tests



MOBILE CNC

This piece of software is designed to help commanders coordinate and communicate with multiple Pi-Tac systems in large operations by enhancing overall communications. This enables the overall field or operational commanders to assist the users of other networks, usually run by subordinates, with various tasks and objectives directly through the linked network.

PANTHEON INDUSTRIES MOBILE CNC

AVAIL	COST
12R	300¥

Rules: This program gives the user a dice pool of six for navigation tests, teamwork tests, or combat maneuvers. This bonus dice pool can be allocated to multiple additional operators. It also gives a bonus of +2 against noise.

SHIELD WALL

This is a simple app that adds layers of benign, shifting “junk code” that an opposed hacker must get through in order to reach the Pi-Tac and linked cyberdeck; thereby creating additional layers of defenses against attack.

PANTHEON INDUSTRIES SHIELD WALL

AVAIL	COST
12R	200¥

Rules: The program gives a +3 bonus to the Firewall of a linked cyberdeck for defense against offensive actions such as Brute Force or Data Spike.

PANTHEON INDUSTRIES TACTICAL PROGRAM DONGLE

AVAIL	COST
10R	Rating x 200¥

PI-TAC ACCESSORIES

PANTHEON INDUSTRIES TACTICAL PROGRAM DONGLE

With modern combat being dynamic and fluid, Pi-Tac operators can't plan for every contingency and run all the appropriate tac-apps. Pantheon realized this and created a specialized **tactical program dongle** that allows operators to run one additional tac-app, beyond the usual number that a Pi-Tac master unit can load (Level + 2). The dongle also allows the Pi-Tac operator to rapidly unload a running tac-app and load a new one from storage using a Free Action instead of a Simple Action, as if reconfiguring a cyberdeck (p. 228, SR5). A PI-TAC unit can only accept one dongle. Switching out tactical programs in combat requires a Simple Action. Placing additional tactical programs on a dongle requires a Software + Logic [Mental] (remaining number of program slots on dongle) Test.

PANTHEON INDUSTRIES HARD CASE CCOB

(COMBAT COMMUNICATIONS AND OPERATIONS BACKPACK)

Modern electronics such as cyberdecks and RCCs are extremely valuable pieces of equipment, and they are equally vulnerable in a combat situation, especially when used on the front lines or absent cover. Based on the widely available generic combat backpack the Hard Case is specifically designed to provide front-line electronic warriors additional protection for their most important devices. It can be worn normally or attached to heavier armors, and it has an internal armored shell engineered to protect fragile cyberdecks or RCC units. In addition to this protective shell, the Hard Case comes standard with a drag handle for emergencies, a quick-charge battery pack, a fiber-optic cable port for easy access, and three micro-hardpoints for mounting external gear such as sat-links, toolkits, or collapsible transmitter dishes.

- Several companies across the globe produce the same generic product, but with different names and logos. They all do the same thing, some for a better price.
- Danger Sensei
- And with varying quality, don't forget that. But Pantheon's Hard Case is specifically designed with the electronic warrior in mind and is produced under license by an outfit



OPTIONAL RULE: SURPLUS OR REFURBISHED PI-TAC UNITS

Arguably one of the most useful (and expensive) pieces of battlefield technology out there, PI-Tac's are coveted pieces of equipment. Since their introduction years ago, the market for surplus or refurbished units is at an all-time high. But, like any secondhand piece of equipment, getting these types of units comes with a price. If a gamemaster wishes to allow their players access to them, here are a few general rules/suggestions:

1) For every 25 percent reduction on the base cost of a new unit, the surplus unit should have lost the functionality of one of its main features. Repairing each function requires both Hardware and Software + Logic [Mental] (Level x 3) Extended Tests, and the necessary replacement parts cost two percent of the original value value of the PI-Tac at +4 Availability)

2) Surplus and refurbished units are more prone to breakdown and susceptible to glitches. If an operator should glitch while using one of these units, one main feature will fail and will need to be repaired through a Hardware or Software + Logic [Mental] (Level) Test. Gamemasters can also elect to have different kinds of hidden code or commands in the unit. These can cause the unit to act in unpredictable ways such as broadcasting all information in the open or going into diagnostic mode at inconvenient times. Get creative with the ways the players are inconvenienced!

3) Such units are more susceptible to both physical and Matrix damage and will take one additional box when receiving either type of damage.

in Cincinnati, Ohio, UCAS. From what I've heard, they do solid if not spectacular work.

- Red Anya
- Nice piece of gear, but is it really a good idea for any decker—or rigger, for that matter—to go full VR in the middle of a firefight? No thanks, not for me.
- Pistons

SPINRAD GLOBAL/ PANTHEON INDUSTRIES MERCURY-ALPHA BATTLEFIELD SIGNAL BOOSTER

On the wireless battlefields of the Sixth World, electronic warfare has greater significance than ever before. Cutting off or limiting an enemy's ability to communicate while maintaining one's own is often a decisive factor in victory. The Mercury-Alpha Signal Booster is designed to give PI-Tac users/operators and their commanders additional advantages during combat or for normal use in remote areas.

The Mercury-Alpha consists of three components: a main unit (or brain) that contains all necessary hardware, software, batteries, and data ports; a foldable/detachable micro-dish transmitter; and an optional, hardened fiber-optic cable that can directly link the brain and transmitter together. The brain weighs only about 450g and comes in a variety of shapes, depending on the user's preference. It attaches directly to a PI-Tac master unit, commlink, cyberdeck, or RCC.

When in use, the Mercury-Alpha has three distinct modes. The first is passive mode, which is specifically designed to overcome most normal obstacles, such as extreme distance or natural ob-

PANTHEON HARD CASE CCOB

ARMOR	CAPACITY	AVAIL	COST
12/14*	8	12R	1,700¥

Rules: Provides protection for contents against physical damage only. Does not stack with other armor.

Standard Upgrades: Drag handle, internal armored shell (for RCC or cyberdecks) [14]*, 3 micro-hardpoints, quick-charge battery pack.

GENERIC CCOB

ARMOR	CAPACITY	AVAIL	COST
8	8	10	1,000¥

Rules: Does not stack with other armor

Standard Upgrades: Drag handle, micro-hardpoint, weapon holster (SMG, shotgun, or assault rifle), quick-access medkit pouch (up to Rating 4).

PERSONAL DRONE RACK

AVAIL	COST
12R	500¥

Rules: Can mount 3 micro drones or one small drone. Requires one micro-hardpoint.



>> KILL CODE <<

structions. The second is active or defensive mode, which is used as an electronic counter-counter-measure against enemy electronic warfare attacks, giving the defending PI-Tac operator bonuses. The third, called aggressive mode, is when a PI-Tac operator (in conjunction with appropriate equipment) uses the Mercury-Alpha's broadcasting power to enhance an Electronic Warfare attack.

- Details are still hush-hush, but what I've been able to dig up is that Pantheon agreed to license the design and the operating system code in exchange for SG manufacturing. And of course, some corps are *not* happy about this.
- Pistons
- Of course not, since someone who is not them is making money off their products! Only a matter of time before someone goes after Pantheon. If they can find them.
- Mr. Bonds

PANTHEON INDUSTRIES “MERCURY-ALPHA” BATTLEFIELD SIGNAL BOOSTER

DR	AVAIL	COST
5	12R	3,500¥

Rules: Can only be used in one mode at a time; switching modes is a Simple Action. In passive mode, provides a +4 dice pool bonus against all sources of noise and doubles effective range. In defensive and aggressive modes, provides +2 for pertinent Electronic Warfare tests. Linked PI-Tac units can also distribute some or all of their +2 bonuses to assist other operators without a teamwork test; this requires a Simple Action. All functions and bonuses are cumulative with tactical programs and associated devices such as satellite links and re-trans units.

PANTHEON INDUSTRIES MICRO-DISH TRANSMITTER

AVAIL	COST
10R	1,200¥

CYBERDECKS EX-SERIES

DECK	COST	AVAIL
Deck Rating	(Deck Rating x 2)R	Rating x 10,000¥
Attack	—	Rating^3 x 500¥
Sleaze	—	Rating^2 x 500¥
Data Processing	—	Rating^2 x 500¥
Firewall	(Rating x 4)R	Rating^3 x 500¥

AMMO

TYPE	DAMAGE MOD	AP MOD	AVAIL	COST (PER 10 ROUNDS)
E0-E0	—	—	5R	50¥*
E0-E0 Rifle	-4	-4	5R	100¥
Fuzzy rounds				
LP, MP, AR			10R	30¥
HP, SMG, S			12R	50¥
Looper				
1			7R	20¥
2			8R	30¥
3			9R	40¥
4			10R	50¥
5			11R	100¥
6			12R	200¥
Zapper rounds	+0M	—	12R	140¥

ARROWLINK

TYPE	AVAIL	COST
50m	6R	25¥
100m	8R	75¥
200m	10R	200¥
500m	12R	400¥

GRENADES

TYPE	AVAIL	COST
CoS	10R	500¥
Douser	(Rating x 2)F	Rating x 50¥
Fuzzy	10R	20¥ x Power
DumDum	(Rating x 2)R	Rating x 50¥

CYBERDECKS N-SERIES

DECK	COST	AVAIL
Deck Rating	(Deck Rating x 2)R	Rating x 5,000¥
Attack	—	Rating^3 x 500¥
Sleaze	—	Rating^2 x 500¥
Data Processing	—	Rating^2 x 500¥
Firewall	—	Rating^3 x 500¥

CYBERWARE & BIOWARE

ITEM	ESS	AVAIL	COST
BioLink	0.5	10	15,000¥
Cranial Shield	0.5	12	5,000¥
Datajack plus	0.15	4	Rating x 3,500¥
EARRS	0.75	10R	30,000¥

SECURITY CYBERDECKS

Model	Rating	Att	Sleaze	Data Proc.	Firewall	Avail	Cost
Guard	2	3	1	2	4	3R	39,000¥
Programs: Encryption							
Shield	4	4	1	3	5	6R	98,000¥
Programs: Encryption, Shell							
Fortress	6	6	1	5	8	9R	377,000¥
Programs: Encryption, Shell, Armor							
Great Wall	8	8	1	6	10	12R	774,000¥
Programs: Encryption, Shell, Armor, Biofeedback Filter							

HUNTER CYBERDECKS

Model	Rating	Att	Sleaze	Data Proc.	Firewall	Avail	Cost
Fox	2	4	1	3	4	4R	68,500¥
Programs: Track, Shell, Hammer							
Wolf	4	5	1	4	5	8R	133,000¥
Programs: Track, Shell, Hammer, Decryption							
Tiger	6	8	1	6	8	12R	530,000¥
Programs: Track, Shell, Hammer, Decryption, Hammer							
Shark	8	10	1	8	10	16R	1,032,000¥
Programs: Track, Shell, Hammer, Decryption, Hammer, Mugger, Fork							

MISC. CYBERDECKS

Model	Rating	Attribute Array	Programs	Avail	Cost
Shadow Warrior	3	6 5 4 3	3	10R	225,000¥
Sublime	4	7 6 5 5	4	12R	375,000¥
Destiny Blade	4	7 6 5 5	4	12R	400,000¥
Defender	5	8 7 5 5	5	14R	560,000¥
Sleeper	4	7 5 5 4	4	14F	375,000¥

COMMLINKS & RCC

Gear	Rating	Data Proc.	Firewall	Avail	Cost
Cyber-6RCC	5	5	5	12R	72,000¥
Skirmisher	4	5	5	8R	50,000¥
Last Chance	3	3	3	11	5,000¥
Frequency	4	4	4	10	3,500¥
Flow	5	5	5	12	4,000¥

ARMOR

Item	Arm	Cap	Avail	Cost
Generic CCOB	8	8	10	1,000¥
Hard Case CCOB	12/14*	8	12R	1,700¥

MISC. ITEMS

Item	Avail	Cost
Booster Chips	—	
Attack Booster	—	Rating x 50¥
Sleaze Booster	—	Rating x 50¥
Data Processing Booster	—	Rating x 50¥
Firewall Booster	—	Rating x 50¥
Armor Defeating	(Rating x 4)R	Rating x 250¥
Slick Willy	(Rating x 4)R	Rating x 250¥
Data Dynamo	(Rating x 4)R	Rating x 250¥
Fortified	(Rating x 4)R	Rating x 250¥
Booster Cloud		
Brute Force	6R	250¥
Control Device	6R	200¥
Crack File	6R	150¥
Crash Program	6R	150¥
Data Spike	8R	300¥
Edit File	—	150¥
Erase Mark	6R	150¥
Hack on the Fly	6R	250¥
Hide	6R	150¥
Jam Signals	6R	150¥
Matrix Perception	—	100¥
Reboot Device	6R	250¥
Snoop	6R	200¥
Spooft Command	6R	250¥
Trace Icon	8R	200¥
Custom Case	6	200¥
Faceless	(Rating x 2)F	Rating x 500
Generic face	+2	+1000
Specific face	+4	+5000
MOS	6	Rating x 4,000¥
Trode Patch	4	1,250¥
Patch Cover	—	250¥

PI-TAC UPGRADES & ACCESSORIES

Item	Avail	Cost
Battlefield Signal Booster 5	12R	3,500¥
"Co-Pilot" MK I	12R	400¥
"Co-Pilot" MK II	12R	400¥
"Co-Pilot" MK III	12R	400¥
"Door Gunner"	12R	200¥
"ECM-Warrior"	12R	200¥
Micro-Dish Transmitter	10R	1,200¥
Mobile CnC	12R	300¥
Personal Drone Rack	12R	500¥
Shield Wall	12R	200¥
Tactical Program Dongle	10R	Rating x 200¥

DISK JOCKEYS & LIGHTSTREAM RIDERS

There are a million hosts on the Matrix, and billions upon billions of data points. Most of them are trivial or obvious, which means one of the traits of a quality hacker is to sort through the dross to find the gold. There is no one right way to do this—the right way is the one that works. This chapter has qualities, complex forms, and Life Modules to help hackers make themselves individual, distinct, and capable of finding the Matrix's most valuable and tightly guarded secrets.

POSITIVE QUALITIES

DECK BUILDER

COST: 4 KARMA

The character has been messing around with tech their whole life; it was only a matter of time before they found a way to push their deck's hardware further so that it could do more than it was supposed to.

The character may install 1 additional cyberdeck module (p. 64, *Data Trails*) into their deck. This quality may only be selected once.

IMPENETRABLE LOGIC

COST: 3 KARMA

Some would call it precognition—this hacker calls it quick thinking. When things in the Matrix start going sideways, they keep their cool, maintain their focus, and think their way around the problem. Which may well be some brutal IC bearing down on them.

This quality allows the character to use their Logic in place of their Willpower attribute while using Matrix Full Defense.

ROOTKIT

COST: 8 KARMA

The character knows how to find the crack in any system, even if it's a minuscule one. Getting the code just right, and hitting that chain on its weakest link take a lot of mental fortitude and accuracy. A helping of luck doesn't hurt.

As a Free Action, a character may take a -8 penalty to their dice pool when they are performing a Data Spike or Resonance Spike Action one that same turn. On a successful hit, the character may add their device rating to the DV of the attack.

SILENCE IS GOLDEN

COST: 9 KARMA

It might be anemia from all that soykaf, or perhaps there's something about the character—maybe the Matrix just likes them. Whatever the case, for some reason the ever-present noise of the Matrix is muted near this character.

The noise penalty for the character and anyone within ten meters of them is reduced by 2. Anyone outside the radius who attempts to connect to the character does not benefit from the noise reduction.

NEGATIVE QUALITIES

AVRSE

BONUS: 9 KARMA

The character knows too many hackers who have been taken out while in VR, and they never saw it coming. They see VR as a trap—how can you get out of a bad situation if your consciousness is not firmly inside your body? Unwilling to take that sort of risk, the character has made AR their mode of choice.





When in VR, the character suffers a -4 penalty to all actions if they are not in a secure location (such as a secured lair or safehouse). This location must be a place that they believe will not offer access to anyone besides themselves and their closest allies.

BASEMENT DWELLER

BONUS: 8 KARMA

The character didn't have a lot of friends when they were a kid ... and now they still don't have that many. What friends the character has tend to be on the Matrix, and the character's social anxiety prompts them to keep it that way. Basically, people in real life are unpredictable and scary, and the character would rather interface from the comfort of their home.

The character suffers a -2 dice pool modifier for all Social tests when meeting a someone in person for the first time. This modifier does not apply to second and subsequent encounters.

BIG BABY

BONUS: 4 KARMA

Pain is a fact of life in the Sixth World, and shadowrunners know that better than most. While most runners accept that they are going to get hurt and are prepared to deal with it, others flinch from the possibility of damage, and this gets more severe each time they actually get hurt. When they're out on the job, if they are burned, shot, zapped, punched, or otherwise damaged, the character becomes extremely reluctant to rejoin the fray.

When a character with this quality is dealt Physical damage, they suffer a -1 penalty to combat dice pools until the enemy or obstacle that dealt the damage is overcome or destroyed.

BUDDY SYSTEM

BONUS: 9 KARMA

Every runner knows that working with a team is always safer than acting alone. Because of stories they've heard or personal experience, the character gets anxious when no one's watching their back.

The character suffers a -2 to all Matrix actions other than Matrix Perception and the Hide action if they are alone, or a -1 penalty if they have an agent slotted in or a sprite compiled to back them up.

DISCOMBOBULATED

BONUS: 12 KARMA

Whoever thought up simsense was a genius. A character with this quality doesn't want to imagine life without it, especially because everything is a little too real. Characters who suffer from discombobulation experience feelings of disorientation whenever they work in the physical world, without virtual reality to steady their all-too-tactile hands.

The character receives a -2 dice pool modifier to all tests when acting outside of AR or VR.

DOWN THE RABBIT HOLE

BONUS: 2 KARMA (MAX 4)

The character is a sucker for clickbait, even when it's obvious that it has nothing to do with the search they're pursuing. They'll start searching for building schematics for a heist, and end reading rumors about Dunkelzahn's assassination. How did the search lead them there? No idea, but at least they learned a lot of rubbish along the way.

For each level of Down the Rabbit Hole (maximum 4), reduce the number of 1s necessary to roll a glitch by one whenever the character attempts to search the Matrix (so that on a roll of 8 dice with two levels of the quality, the character can glitch with only three 1s, instead of the normal five). The gamemaster may also require the character





to make Matrix Search tests that would otherwise succeed automatically to see whether or not a glitch occurs.

ECHO CHAMBER

BONUS: 10 KARMA

The character has a trusty source or two who align with their social, political, psychological, and criminal aims, which makes some information gathering a cinch. Finding info outside of your echo chamber, however, is pretty hard work, especially when wading through all the idiot drek that's out there.

When Matrix Searching as an extended test, the character benefits from a +2 dice pool bonus, but the number of rolls needed to get a glitch is decreased by 1.

FROSTBITE

BONUS: 3 KARMA

The character tussled with Black IC, and it got the better of them. They lost something to it that they can never get back.

Select one skill from the following group: Compiling, Computer, Cybercombat, Decompiling, Electronic Warfare, Hacking, Registering, Software. The selected skill must be one in which the character has ranks. The character permanently suffers a -2 dice pool penalty to that skill whenever IC (besides Patrol IC) is active in a host they are occupying.

INFORMATION AUCTIONEER

BONUS: 4 KARMA

Now and then a hacker will grab some data that's outside the lines of the job. Everyone will pay to keep their secrets, and this data will end up with whoever is willing to pay the most for it.

The character earns a minimum 1,000¥ extra per job during which they collected paydata. Their Matrix persona is familiar to any former auction attendee. When interacting with a character with this quality, an NPC may make a memory test to recognize the character's persona; the NPC gains +1 to their dice pool for every 10,000¥ they spent buying data. If the NPC recognizes the player character, the gamemaster may decide if this NPC was slighted or aided by one of the character's auctions—that is, whether they are angry at or hap-



py with the character. Either way, the recognition should cause a disturbance.

LAZY FINGERS

BONUS: 10 KARMA

Never overextend—the risks aren't worth the rewards. Reckless runners are dead runners. That's the basic code of characters with this quality

Whenever the character attempts to use the Brute Force or Hack on the Fly Matrix Actions to gain multiple marks in a single action, they suffer additional dice pool penalties: -6 for two marks and -15 for three marks.

MALWARE INFECTION

BONUS: 6 KARMA

Somewhere along the way the character got pinged as an easy mark for spam adverts and messages and horrible visits that bring to mind questions about the worth of humanity. The character's view is always at least slightly obscured by pop-ups that definitely have to be closed as soon as possible.

The character suffers a -2 penalty to all Matrix Perception tests.

MATRIX TROLL

BONUS: 7 KARMA

The character can't help but plant misinformation when given the opportunity. In fact, it's their method of choice when interacting with foes. It's hilarious when it's harmless fun with friendlies. Or when it's something they do to total strangers. They have a problem controlling it, is the point.

The character must make a Composure (3) Test to stop from spreading some detrimental misinformation or pulling a Matrix prank, even if it's to the disadvantage of the character's friends.

SLOPPY CODE

BONUS: 3 KARMA

No matter how hard they try, the character can never get their icon to look quite right in hosts. A red fedora in a room full of g-men, a cat in a dog park, no matter what, there's always just something off. Blending simply is not their thing. The character receives a -2 dice pool penalty to Stealth tests when they are in hosts.

WELL, ACTUALLY ...

BONUS: 12 KARMA

The character has a deep drive to settle disagreements the only way they know how—by checking the facts on the Matrix.

Any time the character disagrees with another character (friend or foe), they must spend time, up to thirty minutes, searching for something they will accept as the correct answer to the argument. During this time, the character is multitasking and counts as distracted. The distraction time might be short if the information is fairly concrete and easy to find, but more obscure and obtuse data will require more searching.

In cases where existing canon or reality does not determine the correct answer, the gamemaster acts as the final arbiter as to what information is correct.

LIFE MODULES

FORMATIVE YEARS

40 KARMA EACH

BOOTSTRAP CLICHÉ

There have always been horror stories of growing up SINless, as an orphan, in the slums, on your own. For you this isn't just a horror story, it was your life. But unlike those other kids who didn't make it out, you decided you weren't going to be that cautionary tale. You found a broken down old deck and put it back together, then dropped into the public grids looking for a way out. And you found your way out through the great equalizer of the Matrix.

Attributes: Logic +1, Willpower +1

Qualities: Deck Builder

Skills: Hardware +1, Locksmith +1, Sneaking +1, Software +1 (w/ Data Bombs specialization), Street Knowledge [Sprawl Life] +2, Professional Knowledge [Public Grid] +1

HACKING SAVANT

You remember the first time someone handed you a data pad. That glorious moment when everything finally clicked, and you logged on to the Matrix for the first time. You broke through those parental controls and never looked back. The Ma-



trix and its various grids feel more like home than your real bed ever has.

Attributes: Intuition +1, Logic +1

Skills: Computer +2, Hacking +1, Hardware +2, Software +2, Interest Knowledge [Matrix-related] +1, Interest Knowledge [Grid] +1

HAVE YOU HEARD THE GOOD WORD?

The Resonance is all around us, everywhere, and is just as much a part of all of us as the astral. It's all one and the same; so say the leaders of the cohort. And you, just like those before you, are duty-bound to go and preach the good word of the Learned Machine. While you may or may not still believe in the Learned Machine, you can't quite shake the lessons learned from those who did and still do.

Attributes: Charisma +1, Intuition +1

Qualities: Silence Is Golden

Skills: Computer +1, Con +1, Hardware +1, Perception +1, Interest Knowledge [Hobby] +1, Academic Knowledge [Religion] +1

THE ITSY-BITSY SPIDER

Your most vivid childhood memories are being shuttled from one activity to the next. Grid camp, coding recitals, spider competitions—your parents and/or guardians really wanted you to be a hacker. It's a career that there will always be a need for, and who knows, maybe their little baby will get to work for GOD one day.

Attributes: Logic +1, Willpower +1

Skills: Cybercombat +1 (w/ Personas specialization), Electronic Warfare +1 (w/ Communications specialization), Hacking +1, Software +1, Academic Knowledge [Matrix Security] +1, Academic Knowledge [Technical] +1

TEEN YEARS

50 KARMA EACH

ATH133T

They say the best defense is a good offense, and after someone close to you was disappeared because they slipped up and found out they were emerged, you decided it was time to go on the offensive. No one expects a technomancer to be the best athlete around, so that's what you decided to be. You hid in plain sight, and no one ever saw you for what you really were.

Attributes: Resonance +1, Strength +1

Qualities: Will to Live (4)

Skills: Athletics skill group +1, Software +2, Unarmed Combat +1, Professional Knowledge [Sports] +1, Interest Knowledge [Technomancers] +1

DESTINED FOR GREATNESS

You've been called a visionary more than once—the next Damien Knight, they said, before he got weird. But you don't want to be the next anybody. You have a vision, a purpose, and it's going to lead you to far grander things than Damien Knight ever achieved. Because you've got something he's never had in your pocket: You've just emerged.

Attributes: Resonance +1, Logic +1

Qualities: Focused Concentration (4)

Skills: Leadership +1, Negotiation +1, Registering +2, Software +2, Professional Knowledge [Business] +1, Interest Knowledge [Corp Culture] +1

HACK-A-THON MEDALIST

You came from a decent family. Your parents were wagerslaves for some corp, you got decent grades, and overall your home life was stable and safe, though also fairly dull. It was when you stepped out the front door that things got bad. They were always there, taking your credits, ruining your things. You always said one day you'd own those bullies, but you had to live through it first.

Attributes: Logic +1, Agility +1

Qualities: Quick Healer (3)

Skills: First Aid +1, Perception +1, Software +2, Sneaking +1, Interest Knowledge [Matrix Related] +1, Academic Knowledge [Any] +2



THE FLOW

Just let it happen—let life flow through you. Everyone and everything is connected in one way or another, and things are gonna turn out. You came to this epiphany after taking a hit of deep-weed behind your school or foster home, and now it's a way of life. And as far as the Matrix, it's obviously all around us—all we have to do is plug in. There's no better high than the trippy stuff you can see in there.

Attributes: Willpower +1, Body +1

Qualities: Common Sense (3)

Skills: Chemistry +1, Hacking +2, Palming +1, Software +1, Interest Knowledge [Matrix-Related] +2, Interest Knowledge [Drug-Related] +1

JACKED OUT

You've never been on the inside of any group, and you'd never choose to be even if they'd let you in. You spend your days with more interesting beings—namely, your sprites. You never have to be alone if you've got the only friends that matter with you. Who needs real people, right?

Attributes: Resonance +1, Willpower +1

Qualities: Profiler (3)

Skills: Perception +2, Registering +2, Software +1, Professional Knowledge [Matrix-Related] +2, Interest Knowledge [Any] +1

MATRIX ROYALTY

Managing people is easy. A little snooping here, a little intimidation there, and they fall right in line. And that line starts with you, the taste maker, the king of the school, the queen bee. Everyone has a button to push, and you're happy to press it for them.

Attributes: Logic +1, Charisma +1

Qualities: Too Pretty to Hit (3)

Skills: Computer +1, Con +1, Electronic Warfare +2, Intimidation +1, Professional Knowledge [Psychology] +2, Interest Knowledge [Matrix-Related] +1

TECHNO-RIGGER, QU'EST-CE QUE C'EST

Home wasn't great, school was dumb, and being emerged—well, that's about as dangerous as it comes. Luckily, you found a garage that let you be yourself and hang out in exchange for holding a wrench or two. As it became clear you weren't there to boost anything, they actually let you help. At the first turn of a lug and rumble of the engine, you were in love.

Attributes: Resonance +1, Reaction +1

Qualities: Dealer Connection (3)

Skills: Compiling +2, Pilot Aircraft +1, Pilot Ground Craft +1, Registering +1, Professional Knowledge [Vehicles], Street Knowledge [City] +1





PARALLEL PROCESSING

BY AMY VEERES

Respec stared up at the ceiling in thought, reclining in the rear of Netcat's Econovan. Their transport for tonight's run was an inconspicuous panel van loaded with medkits, tools, hidden guns, emergency commlinks, and most importantly, the object Respec was lounging on while Netcat drove. It was a surprisingly comfortable sofa for extra passengers, willing or otherwise—definitely a step up from the hard-plastic ambulance seats found in most shadowrunner transports. And way more comfortable to lay down on.

For a moment, the absurdity of her situation struck Respec. Netcat had far more experience than her, so it seemed natural to let her take the lead. Except for the fact that Respec was at least fifty years older than the other technomancer. The first-generation elf pinched the bridge of her nose, realizing this was a problem that an astronomically low number of people could ever relate to. It was her burden to bear.

She climbed out of the van's rear, having uploaded the mission parameters, required passcodes, and other data from the prep stage to a nanomemory tattoo between her toes. Nobody but weirdos bother to look there. Netcat was next out. Both of them

wore dark armored clothing that might be passable as something a nightshift security agent might wear, though with no colors or logos specific to their target. On Respec's hip rested a completely average-looking commlink. Specifically, the kind security guards at the Makoto Shiranui Memorial Hospital, Brought To You By Mitsuhamu Computer Technologies were issued. The pair checked each other's disguises before walking in opposite directions toward separate hospital entrances, outerwear for the chilly February night concealing weapons and other contraband. In a private link, they reviewed their plan.

<According to Mr. Johnson's information, this hospital, as you'd expect from a MCT operation, isn't just a hospital. They never stopped their technomancer research—they just hid it better. This is where they ... Ugh. It's disgusting how clinical this report is.>

<Just finish it, Respec.>

Respec winced in meatspace, doing her best to focus back on the Matrix and ignore the chill of the night blowing through her trenchcoat.

<It's a real hospital, but beneath it is an unlisted facility. This is where they process suspected



virtuakinetic children. Test their level of technomancy and decide whether to keep them for further study or send them overseas for experiments.> The taller elf turned a pale green as AROs she had uncovered of the experiments flashed in front of her. Respec looked ready to vomit before downing a handful of pills from one of her coat's pockets, dosing herself with an antinausea med that returned her face to its normal pasty pallor. She went back to her message.

<I choose to believe that Mr. Johnson is, like, the parent of one of the kids or something, and that is who we are extracting them for. Please, don't take that away from me.> Respec closed her eyes and placed a hand over the display, just above the biometric scanner. She focused her mind and broke through the wave of fading washing past her as her complex forms went to work. The door opened with Respec none the worse for wear.

Meanwhile, one of Netcat's sprites flew into the first security terminal she encountered, and in just a couple seconds, the display welcomed Guard #631 for her night shift. The tacsoft indicated to both of them that the closest doors were unlocked, so Netcat continued reviewing the details. <Moving on. We're going in as guards for the legit hospital section, then hacking access to the sub-basement, where the experiments are taking place. The whole facility is run in a single security suite. Well-guarded, but once we're in, that's it. Take out the security, get to the sub-basement, extract as many victims as we can before security finds its marbles.>

The avatar of Respec in Netcat's periphery, a silver-haired woman from some positively ancient sim-game, gave a shaky thumb up. <Null sheen, 'Cat.>

Netcat's avatar, her real-life self with her features disguised in a green aura, recoiled suddenly. <Don't call me that.> Netcat shook her head in the real world and began preparing a new array of sprites, these ones taking the form of glowing datachips, as was her habit. Respec likewise prepared herself, using a pistol-slide to deposit an array of datachips in her hands. Crushing them in a silent prayer to O1, she used the ritual to gather focus and put her concentration where it needed to be.

<Ready when you are.> Netcat messaged, while Respec was still threading a complex form to open the lock on her entrance. She eventually caught up to Netcat, who waited with an agitated look but offered no comment. They silently exited the dark, empty lobby, entering the hospital to begin their rescue mission.

Respec began by connecting to the hospital's host, another complex form shielding her from the

spider's eyes as she edited herself out of camera feeds in real time, meeting Netcat in a corner undetected by any security devices. The two squatted and watched opposite ends of the hallway, both ready to draw a weapon if a guard came along. Respec had brought long-range stun devices among what she called "some other stuff for emergencies," while Netcat kept a light pistol—silenced, of course—in a shoulder holster beneath her jacket.

<I didn't notice you in the host. Something from your new stream?> Respec inquired, staring down through the darkness at the end of the hallway.

<Didn't have to hack anything. I watched where the cameras were and made my move from one blind spot to another.> Netcat couldn't hide the smile poking at the corners of her mouth. Respec understood—technos weren't expected to display any physical skills, so when you got a chance to flash some of them, you took it.

Respec followed behind Netcat, who led her down the hall, staying one step ahead of the rent-a-cops and the spider. By the time they made it to the first-floor security room (where the spider was based), the map Netcat had acquired before the run appeared on their AR displays. Flashing dots revealed the locations of the guards, while lighter circles around each of them representing their sensory ranges. None were near the security room they were about to breach.

Respec drew her weapon and nodded to her partner. Netcat grabbed the door handle. One of her sprites flew into the door, and it unlocked silently. She pushed it open, and Respec fired three darts into the back of the dwarf inside, who fell out of his chair with a soft thud. Respec let her partner in after the dwarf was incapacitated, kneeling over his prone form while Netcat took his seat and began diverting security.

<How are you gonna handle the donuts?> Respec inquired, bricking the unconscious spider's cyberdeck, emergency commlink, and any cyberware that looked like it might make her life more difficult.

<Donuts?>

<The security. What are you going to do to make sure security doesn't hassle us?>

<Oh.> Netcat's text actually paused. <Setting off alarms on the roof, spoofing an armed assault from a helicopter. Once they're all in the stairway access, I'll disable their keycodes.> Both of the elves' fingers brushed across opposite ends of the security terminal, enough to establish a connection. Before entering the building's host, Netcat "spoke" again.

<And, Respec? Use slang from the last two decades if you want me to understand you.>



In VR, their icons appeared next to each other inside the hospital's host. Respec conjured up the map again, this time showing each floor. Netcat stopped preparing her hack and watched her partner curiously.

<Let's see how this goes.> Respec sent.

Respec produced some indeterminate data from inside her icon and pressed it into the security terminal's icon. Eventually, it sunk into the transparent block, which lit up green. From there, she typed furiously; in reality, and in VR, a message went out through the hospital's PA system.

Words rang out. "Security personnel report to the fifth floor for a code gold. Repeat, code gold on the fifth floor. Further instructions will be given on arrival." The message then repeated in Japanese.

The system would also send similar text messages to all security personnel. "Code gold" meant a high-priority, high-security individual was coming in, the type of person who should be the focus of security efforts. It was the type of distraction that would only last until everyone figured out it was fake, but that should be long enough.

Netcat and Respec turned back to the map, watching as the dots Respec highlighted rushed to the top floor. Once the last one had left the elevator, Respec turned around and continued the second stage of her plan.

<It's done,> she sent after a few moments.

<What's done?> Netcat asked. There was, of course, no tone on the brief text, but Respec imagined she could sense the trepidation.

<All doors leading away from the fifth floor are locked, and I've erased the list of approved access codes, keycards, and biometrics. There's no way out.>

The two technomancers returned to their meat bodies. Respec tried not to look too pleased with herself.

Netcat did not let her stay too self-satisfied. She spoke aloud for a change of pace. "Just remember, not every guard went to the fifth floor. You got some out of the way, but we still might run into trouble." She patted Respec's shoulder as she walked by, then gathered their things and left the security room. Respec did the same trick on the terminal and the security room's lock on the way out, keeping the spider's movements restricted. Assuming he woke up before the job was done.

The two technomancers made their way to the hidden basement access. They moved quickly and smoothly. What security hadn't gone to the fifth floor did not show up in their path, and the spider was

down for the count. This would probably be the easiest stretch of the run.

Halfway down the hall, Respec began laying out a set of palm-sized metallic devices, two stuck to the walls and one on the floor. As she finished up, she paused and breathed deeply. Preparing herself. Waiting for the devices to do what they were supposed to do.

After long enough for the silence to become awkward, Respec picked up the devices and pointed to an inconspicuous closet door. <Sonic probe says the floor's solid, except behind that door. Thirty-meter drop.>

Netcat didn't say anything, though her usual stoic expression softened somewhat.

"I don't know what this is going to be, exactly," she said aloud. "It's not going to be good. They never pay us to break into places that are good."

"It will be the job, and we'll deal with whatever it is. And later, we'll erase from our memories whatever we can't bear to keep."

Respec's fingers brushed across the bezel of the biometric/keycard combination lock. The panel turned green, and the last of the sprite cluster Netcat compiled at the beginning of the run rushed through the widening crack to disable the gun turret on the other side of the door.

<How did you know there was going to be a turret?> Respec took up the rear, holstering her stungun.

<I didn't. I just knew there was going to be something. There's always *something*.> Netcat led the way through a dank hallway to an elevator. They entered, and as they sped downwards, Respec's device pinged inside her bag.

<Something using IR signals—probably cameras? And an organic interface. Probably some kind of bio-drone.> After Netcat received the message, she nodded and drew her Predator V, while Respec took out her two-generations-old Predator III.

A few minutes and a half-dozen floors later, the elevator opened into a dimly lit, suffocatingly sterile hallway. Before they had a chance to step off of the elevator, they were stopped by a wave of miasma code spreading through the building's host into their PANs and resonance link. Netcat tried to send a message, but all that came out was discordant noise. So they turned again to their voices

"That's one hell of a drone."

"Are we totally sure it's a drone?"

The conversation was cut short by the screech of metal scraping plascrete floors. Heavy footsteps combined with loud servomotors and metallic sounds joined them as the creature patrolling the



halls turned a corner, trudging along a path walked so often that a pattern was worn into the hard tiles. In spite of her low-light vision, Respec found herself unable to focus on the creature's form as it rounded the corner. It was armored, bulky, and gave off a jaw-aching burr of dissonant noise.

"We should have brought more hardware than a stun-gun and a pistol each. How are we going to bring down that ... thing? And if it gets close ... I don't even want to think about it."

Netcat holstered her pistol and shook her head. Respec desperately tried to urge an idea to leap from somewhere—anywhere—into her brain.

Netcat spoke before any idea arrived. "We can't scrub the mission and come back with more fire-power. Security will be on to us after that code gold stunt. This is our only chance."

"That's great, but how are we supposed to deal with that biodrone?!"

"I have a plan." Netcat stood and flexed both knees. "Get ready to bolt. You can hear it turning the corner now."

Netcat was the first of the two to run for it, with Respec following and attempting to quell a rising panic. The pair's footsteps attracted the cyberthing's attention, but it couldn't turn around. It could only trudge down the hall on the route laid out by its IR camera-eyes, passing bedridden children and adolescents who were hooked up to IVs and trodes linked to a master terminal at the end of the room.

"All right, let's get it done," Netcat said. "Stop whatever the terminals are doing to the kids. I think I have something to hold the drone off." Netcat spread her arms and waved them forward to direct flecks of AR data in front of her. Eventually, the errant code took the shape of a cartoonish knight wielding a sword and shield. It wasn't like the tiny creatures she usually summoned—it was metahuman-size and ready to do battle.

"Great form sprite, *morkhan!*" Once formed, the sprite rushed off to do battle with the biodrone, keeping it distracted while its summoner began unhooking the IVs.

"Mor-what now?" Respec raised an eyebrow at Netcat while her AR avatar dealt with the agent keeping the test subjects in hot-sim VR.

"The hell kind of elf doesn't even know how to swear in Sperethiel?"

"The kind whose parents were human. I don't know! Swear in Japanese like the rest of us!" Respec continued to work on the code while Netcat finished with everything except the VR electrodes.

Out of nowhere, the fight in the halls dragged into the lab, where the sprite, corrupted and falling apart from extended exposure to dissonance, was barely holding off something that was most certainly not a biodrone.

The two shadowrunners could finally see what was between them and the exit. It was an ork woman covered in grimy metal plating, blades for hands, and oversized cyberlegs for balance. The only traces of her metahumanity were the ragged hair around her skull and the tusks sticking out of a lipless mouth. It was a dissonant cyberzombie. It had to be, because Respec did not want to consider what else the form in front of her might be.

It hadn't showed up at a good time. Netcat had fallen to her knees thanks to the fading brought on by her sprite's destruction. The cyberzombie felt the weakness and turned to face her, raising a blade-arm.

A deafening crack sounded out. As the great form sprite fell apart, the cyberzombie collapsed, sparks and brains flying from the hole where the back of its skull used to be.

Respec's gun was still smoking. Unable to hear over the ringing from the point-blank gunshot that took the cyberzombie down, she spoke in Resonance instead.

<That was something you said once, right? Half our job is shooting things in the back of the head.>

Netcat laughed, a forced, nervous sound but still quite welcome at this moment. <That sounds like me. Good that I told you. Good that you remembered.> As the excitement faded, her smile softened.

<At least the kids are still out of it. Assuming the logs in that terminal aren't doctored, the IV drip was a sedative, which means they'll be knocked out for a while. Hope we didn't mess up their hearing or something.> Respec started dragging the corpse into the hallway's center column.

<There's something else we should be thinking about, though.> Netcat finished unhooking their targets, knowing the job was only halfway over. Then she asked Respec a question that she clearly should have been ready for but was dismayed to find out she's not.

<How the frag are we supposed to extract a dozen children out of the building?>



DATA STREAMS

POSTED BY: CLOCKWORK

It's been a few weeks, and since neither of the knife-ear toasterfuckers have had anything to say about recent developments, it looks like the honor of explaining what they're up to now falls to me. I can't in good conscience let you guys go without knowing the latest in expanding technomancer powers. Forewarned is forearmed and all that. But buckle up, because things in these parts aren't getting any less scary.

Those of you who aren't completely fresh might remember five or six years ago, when technomancers had these things, streams, that basically worked like a mage's traditions. They were something you had to watch out for, but they could go on page two of the dossier when you looked at the full range of technomancer threats. It wasn't critical information. With the lovely Ms. de la Mar's overhaul, the technos got a big power drop, and one of the things that seemingly became disconnected were these streams. What a happy day that was ...

Guess what? They're back. Or at least, something similar enough I figure the name "stream" is as good a way to describe them as any. It's like the Matrix is cheating, and not in our favor. Not to worry, JackPoint, because this time, I'm on your side. I'll walk you through each and every permutation of technomancy and what it lets them do. All the better when you're worrying about one flash-frying your targeting system without knowing you're there, or turning your drones on you, or jumping three stories with off-the-rack cyberlegs. Think those were jokes? Tall tales? Think again.

HOW THEY FLOW

To borrow a cliché that was outdated when my dad was still alive, these ain't your granddad's streams. If I had to compare them to something magical (which I do, because I know it pisses

off Respec), I'd compare them to adept ways instead of magical traditions. They've completely changed to fit a new role in the Matrix, or are possibly a different thing entirely, and I'm very sad to report that they've given technomancers whole new toolkits. They're not just freaky mind deckers anymore. Now they can be freaky mind riggers, summon sprites like they're going out of style, and even use some cyberware. Yeah, this sounds unbelievable, but keep reading. These are real. The intel is solid. Mitsuhamu doesn't play around with technomancer rumors.

- And the other shoe drops. What do we think?
- Slamm-0!
- As long as he's sharing and doing nothing malicious, I say we let him finish. Deal with him when he tries to act.
- Bull
- Agreed, begrudgingly.
- Glitch

SOURCERS

You could call these guys the old-school technomancers. Not Otaku old-school, but the first generation, where sprites were an afterthought and the novahot technos were slinging complex forms that no mundane code could keep up with. That's what this stream is all about. They can thread harder, faster, and sustain more forms at once than their peers. Even worse, when they get to their Hyperthreading ability, I'm not sure even the best hardware and the best mind on this rock could match one of these freaks in sheer hacking ability. The only thing I can think of off the top of my head that might (key word: might) be able to outhack them is one of the abominations that technoshamans can summon, but that's for the next section.





- Could you leave off the editorializing? Every time you say something like 'abomination,' I get worried you're about to post your manifesto.
- Glitch
- To be honest, this is an excerpt from it. I could share the entire thing if you like.
- Clockwork
- No.
- Glitch
- It always helps to remember that Clockwork is acting as his own hype man for the tunes he's trying to mix. In other words, see hyperbole for what it is.
- Pistons

If you have to start slingin' code against one, I suggest putting them in a situation where they need to rely on sprites, or GOD is about to converge. That should counteract most of their cheats. And hey, even if the second case doesn't solve your problems directly, there's always the chance they'll piss GOD off enough that an Avenging Angel gets sent in to blow the fragger to bits. Just make sure you aren't in the same zip code as them when that happens. Of course, that's only if you have to start slingin' code. Ideally, you should just shoot them. Doesn't matter how good a Sourcerer is, they still can't hack a piece of copper-jacketed lead moving at nine hundred meters per second.

TECHNOSHAMANS

In case the name didn't clue you in, this stream takes a more spiritual approach to technomancy. They may not be as good with complex forms as Sourcerers, but what they bring to the table is somehow more horrifying. Anyone who's dealt with technomancers since the Matrix overhaul knows how bulldrek sprites are, and Technosha-

mans double down on that. They almost always have at least one of the awful things around, and most likely will have far more than that. And of course, because there is a God, and He hates me, every single fragging Technoshaman having a literal army of sprites isn't even the most terrifying thing about them!

No, the most terrifying thing about Technoshamans would have to be great form sprites. I ... I don't know how to describe their capabilities in the usual sterile manner, so instead I'm going to tell you a little story. A while back, I was on a run trying to steal a prototype weapon from an Ares lab. The complication? There was another team of runners trying to steal the same gun. Anyway, I was trying to hack into the lab's host, see if I could get their gun turrets to turn on the lab security. Anyway, in waltzes the Technoshaman, plain as day, his persona appearing as this ugly humanoid thing made entirely out of feathers. Fragger looked out at the army of Black IC and spoke a few words in a language that was old when the stars were new. (I didn't hear enough to be sure, but I think it might have been COBOL.) Anyway, whatever it was, the thing it brought forth ... I'll never forget it. A giant crow of silicon and fiber-optics, large enough that, if there were a sun inside the Matrix, it would have blotted it out. Then, with a flap of its wing, the ghostdammed thing blew down the entire host. That's a Technoshaman. That's what they do.

- That's really poetic. I'm kinda surprised to see something like that on here at all, especially coming from you.
- Red
- I'm not being poetic. That is literally what happened. It took the host of a top-secret Ares lab down in the time it takes someone in meatspace to blink.
- Clockwork





- What? Taking down a host is impossible. I'd put money on it.
- /dev/grrl
- I'm just telling you what I saw. I don't know how I can make it any clearer. Sourcerers? Machinists? I can handle them. Technoshamans? They scare me.
- Clockwork

MACHINISTS

Since I'm fairly certain everyone here needs a break from the terrifying realization that there are toasterfuckers out there who can take down hosts with a wave of their hand, let's switch to a happier subject. Machinists! The worst they can do is kill you. Machinists aren't as good with complex forms as Sourcerers, and they can't summon sprites the way a Technoshaman can, but what they can do is hijack your rotodrones and have them give you a terminal case of lead poisoning. Their hacking abilities are mild at best, but even if your devices are secure enough that they can't get at your drones, they usually come with several of their own. Think of them as riggers who happen to hack on occasion, like if I had an army of evil twins or something.

Anyway, when fighting them, expect the kind of threats you'd usually expect from a rigger. You could be up against anything from weather balloons with chameleon coating and sniper rifles to a NeoNET Juggernaut coated with so much armor that the only ways to defeat it are to go to the nearest IJN base and see if they'll let you borrow a battlecruiser, or to go up a flight of stairs.

- Are you speaking from experience here?
- Rigger X
- Suffice to say it was the worst investment I've ever made. The armor plate alone set me back thousands. Five runs later and I'm still in the red.
- Clockwork

CYBERADEPTS

To finish this all off, we have what are simultaneously the most and least terrifying of the various techno breeds: Cyberadepts. The name's probably already given away what it is they do. Somehow, they manage to deal with cyberware in a way most technomancers can't. This might not seem like a big deal until you see a novacoked-up



Cyberadept with plenty of chrome running at you while swinging around a Claymore longer than you are tall. On top of that, they're capable of overclocking their cyberware so they can get more out of what they have. One Cyberadept I was following claimed that when he overclocked his cybereyes, on a clear night he could see the people moving about inside Ares's moon base. I have no idea if that's true or not, and indeed it probably isn't, but the fact that his friends believed him should say a lot about what Cyberadepts are capable of.

Fighting a Cyberadept isn't like fighting a normal technomancer. You don't have to worry about them hacking your gun or making your car drive into oncoming traffic. Instead, you have to worry about them shoving a pointy bit of rebar through your skull. Fairly low tech for someone so reliant on technical wizardry, but there you go. Treat them the same way you'd treat any other heavily cybered bruiser. APDS rounds can work wonders, and if that doesn't do the trick, try running them over with a truck. Repeat with bigger trucks until either they're dead or you run out of trucks.

- Shame it leaves such a mess, though. I was picking bits of cyberskull out of my fender for days after the last time I did that.
- Rigger X
- There's professional cleaner services you can get to deal with that kind of thing, no questions asked. They cost a mint, but it's worth every nuyen.
- Clockwork

One thing that should be noted is that unlike real adepts, they have no issues when it comes to working their witchcraft with guns. Whereas an actual adept can't get a gun made into a weapon focus because reasons I don't really understand (I'm a techie, not a professor of thaumatology), a cyberadept can and will use guns to do things that you wouldn't believe. That guy I mentioned, with the magic cybereyes? He once ricocheted a bullet off an exposed nail in a wall to hit an Azzie cultist in the back without harming the cultist's hostage. I saw it and I still have a hard time believing it.

- I mean, I can do that too.
- Kat o' NineTales
- Vids or it didn't happen.
- Clockwork

NEW TECHNOMANCER QUALITIES: RESONANT STREAMS

Aside from being extremely technical in nature, the Resonance's constantly shifting nature makes it unpredictable and very malleable. This flow must be followed by any technomancer seeking to manipulate and control the Resonance. Some technomancers have found that identifying a path to power helps them to focus their abilities. These paths are called Streams. For all technomancers, there are several fundamental rules to streams that must be followed:

- A technomancer cannot follow two streams simultaneously.
- Players may amend previously created characters and retroactively purchase a stream.
- Streams cost 20 Karma to purchase and are not subject to the double cost of qualities after creation.

Daemons are a new type of bonus. Like their name suggests, these are autonomous processes that the technomancer learns to keep running always. Mechanically speaking, these are passive bonuses that affect a specific aspect of the character, giving them either a new power or an improvement to an existing power. Every stream has an associated Daemon, along with other benefits that help to provide the stream with flavor. The complex form listed with the stream becomes available for purchase by technomancers in that stream, but it is not automatically given to them. These complex forms are only available to technomancers in those particular streams.

CYBERADEPTS

One of the effects of the recent changes to the Resonance and the Matrix was the unexpected advent of what many are calling Cyberadepts. These are technomancers who have the uncanny ability to modify the way the Resonance interacts with cyberware.

BENEFITS

- All complex forms that affect cyberware are performed with 2 less Fading Value.
- +2 dice pool bonus to Compiling and Decompiling Tests involving Fault and Companion sprites.



DAEMON

Every time the Cyberadept goes through Submersion, they align their body, spirit, and cyberware. This means that a Cyberadept who has Submerged may restore Resonance that has been lost to cyberware (and only cyberware) by an amount equal to half their Submersion Grade (rounded up). Resonance lost by other means (such as bioware or Essence Drain) is not restored.

COMPLEX FORM: OVERDRIVE

Target: Cyberware **Duration:** S **FV:** L + 1

Like the power of the same name used by great form machine sprites, the Cyberadept can put a single piece of their cyberware into Overdrive. This power can only be used on cyberware that is currently installed in the Cyberadept. The Cyberadept rolls a Software + Resonance [Level] Test. Half the net hits (rounded up) are added to the effective rating of the cyberware. This can—and often will—push a piece of cyberware way past its intended limits. When this complex form is no longer sustained, the cyberware takes a number of boxes of Matrix damage equal to the level of the complex form. This damage cannot be resisted. On a glitch, the cyberware is bricked, filling its Matrix Condition Monitor. On a critical glitch, the damage is physical, rather than Matrix. The rules for repairing Matrix Damage appear on p. 228, SR5. The rules for repairing Physical Damage to gear appear on p. 143, *Run & Gun*.

Example: Grandeur has decided to use Overdrive on her wired reflexes system to combat a slew of guards. The wired reflexes system is a Rating 2—it's good, but not the best. She uses Overdrive at Level 6 and gets 4 hits on her Software + Resonance Test. This improves her Wired Reflexes to Rating 4, which gives her +4 Reaction and +4d6 Initiative Dice while she sustains her complex form. Because she's sustaining a complex form, she suffers a -2 penalty to all actions. When she drops the complex form, her wired reflexes suffer 6 points of unresisted Matrix damage. Since her wired reflexes normally have 9 boxes, she needs to be cautious going forward. Grandeur would normally have to resist 7 points of Fading, but because she's a Cyberadept, she only has to resist 5.

MACHINISTS

Technomancers that identify as Machinists are in tune with machines of all types in ways that no other technomancer can understand. They identify with gears, moving parts, and other machine properties in ways that make an average steampunk aficionado seem restrained.

BENEFITS

- All complex forms that affect devices are performed with 2 less Fading Value.
- +2 dice pool bonus to Compiling and Decompiling tests involving Machine and Generalist sprites.

DAEMON

Machinists have such an affinity for machines that the very thought of controlling only one at a time is anathema. They have learned to twist the Resonance in such a way that their living persona can function as an RCC, emulating all the abilities that are available to anyone using an RCC (minus the ability to form or join a WAN). The new attributes are gained in addition to their normal Matrix attributes. The Noise Reduction rating is equal to the Machinist's Willpower, and the Sharing rating is equal to the Machinist's Charisma. Technomancers with this Daemon can use the Resonance [Program] echo (p. 258, SR5) to copy the effects of autosoftware as well as cyberprograms.

COMPLEX FORM: LOTO

Target: Device **Duration:** I **FV:** L - 1

Using this ability, a Machinist can disrupt the signals going to and from a machine, separating it from its master(s). This power can be used on any device. When using it, the Machinist rolls a Software + Resonance [Level] v. Willpower + Firewall Opposed Test. The device is completely disabled for a number of Combat Turns equal to the net hits on the test. In the case of something that has a Pilot rating, the Pilot loses functionality as well.

Example: Voxel is in a bit of a jam, as he's being questioned by a guard who doesn't seem to believe him. To ensure that he can get away cleanly, Voxel targets the guard's commlink and hits it with LOTO. Voxel decides this is crucial, so he threads it at Level 6. Voxel's player rolls Software + Resonance [6] v. the commlink's dice pool of 6. Voxel's player wins handily, getting 4 net hits. The commlink stops functioning, and the guard looks over at it to figure out what's wrong. Resorting to physical violence isn't Voxel's style, but he convinces the guard to let him look at the commlink, and then applies a stun glove to the back of the guard's neck, knocking him out cold. Voxel would normally have to resist 3 points of Fading, but because he's a Machinist, he only has to resist 1.



SOURCERORS

For some technomancers, it's not enough to let others do the job for them. They like to get involved in the process of creating and manipulating raw source code. Sourcerors weave the Resonance to make Complex Forms that act in ways that baffle even other technomancers.

BENEFITS

All complex form threading tests are performed with 2 less Fading Value.

DAEMON

Sourcerors spend so much time and energy getting familiar with their complex forms that they can thread them with relative ease. They can sustain up to half of their Submersion Grade (rounded down) in complex forms without taking a penalty. Any complex forms sustained beyond this level are treated as normal.

COMPLEX FORM: HYPERTHREADING

Target: Complex form **Duration:** Varies **FV:** Varies

The Sourceror can merge multiple complex forms into a single form, making multiple results in a single action. Doing so has its limits; the target and level for the Hyperthreaded Form must be the same for all merged complex forms. Resolve effects with a single Software + Resonance [Level] Test, the results of which are used for all the merged complex forms. The Fading Value is determined by taking the highest Fading Value of all the merged complex forms, and then adding 1 point for each complex form added after the first; the -2 bonus for being a Sourceror is applied at the end.

Example: Respec wants to Hyperthread Pulse Storm and Resonance Spike against an enemy hacker. She declares her target to be the enemy hacker and decides to go for broke with a Level of 8. She rolls Software + Resonance [8] and gets 4 hits. The two forms now act as one. The enemy hacker then rolls Logic + Data Processing against a threshold of 4 for the Pulse Storm, and also rolls Willpower + Firewall against 4 hits for the Resonance Spike. Respec then has to resist a Fading Value of 5 (L-3, the highest Fading Value of the merged complex forms) plus 1 (for the second complex form) minus 2 (for being a Sourceror), for a final Fading Value of 4.

TECHNOSHAMANS

Technoshamans redefine the spiritual aspect of technomancers by integrating the spiritual with their abilities. They are masters of sprites, phenomenal at interacting with Resonance creatures, and many even show a penchant for dealing with technocritters.

BENEFITS

All Compiling and Decompiling acts are performed with 2 less Fading Value.

DAEMON

Technoshamans learn to eke out the most power from their sprites. Thus, they gain the ability to bring forth a great form sprite. Every sprite template has a great form power that only Technoshamans can utilize. To access this power, the technoshaman must compile the sprite as a great form sprite. Doing so doubles the Fading Value that the technoshaman must resist. Additionally, using a great form power automatically uses all remaining tasks, and the sprite decompiles immediately after the power is done being used.

COMPLEX FORM: SPRITE PET

Target: Sprite **Duration:** P **FV:** L + 0

This complex form allows a technomancer to convince a registered sprite to become his "pet" and stick around even when other sprites are around. It can only be used on a single sprite at a time. Because this complex form takes several hours to complete, it can be considered a sort of "digital ritual." The Technoshaman spends a number of hours equal to the sprite's level attuning himself to the sprite. At the end of this time, the Technoshaman pits his Software + Resonance [Level] against the Level x 2 of the sprite. If the Technoshaman gets more hits, he feeds the sprite a number of Karma equal to the sprite's level. If this is done, the sprite becomes a sprite pet. This means that the sprite no longer has a limit on favors and tasks and can be active at the same time as any other sprite. It also no longer counts against the Technoshaman's limit on registered sprites. This can only be done on one sprite at any given time. If the sprite pet is destroyed, it will return to its home Resonance Realm, and the Karma spent is lost.



Example: Netcat decides that she wants to make one of her favorite sprites into a pet. To do this, she goes into her meditation room and turns on the white noise generator to help her focus. Since the sprite she's trying to make into a pet is level 6, she knows she's going to need to keep her wits about her. She spends six hours attuning herself to the sprite, talking with it, getting to know its personality, and forming a bond. She then rolls Software + Resonance [6] against the dice pool of 12. She gets 1 hit, barely enough to convince it to join her. She spends 6 Karma, and the sprite becomes her pet. Netcat now has to resist 6 points of Fading.

GREAT FORM POWERS

GREAT FORM	POWERS
Courier	Freenet
Crack	Gatekeeper
Data	Grep
Fault	Mangler
Machine	Overdrive
Companion	Sacrifice
Generalist	Coroutine

COROUTINE

The sprite uses the Coroutine power to assist or hinder a single task. The compiler chooses which target will receive the effect and then determines if it will be done as a hindrance or an assistance. If assistance is chosen, the sprite's Level is applied as a bonus to the dice pool of the target's next Matrix test. If hindrance is selected, the sprite's Level is applied as a penalty to the dice pool of the target's next Matrix test.

FREENET

There are rumors that this power is like the ones used by the Dox to distribute information. Regardless of origin, it functions in a similar fashion. The sprite targets a file that it has a mark on already,

and the sprite then activates the power. Freenet can open a tunnel to devices, personas, or hosts with a Firewall rating less than the Sleaze rating of the Sprite. The file is copied through the tunnels to a number of devices, personas, and hosts equal to the sprite's Level each Initiative Pass. While sustained, the sprite accrues Overwatch Score equal to its Sleaze attribute every Combat Turn.

GATEKEEPER

The sprite using this power chooses two targets. The first target is called the Keymaster, which can be any persona. The second target is a host or device to be opened. If the Gatekeeper's Sleaze rating is greater than or equal to the Firewall of the host or device to be opened, then the Keymaster is treated effectively as the owner of the device or host. While sustained, the sprite accrues Overwatch Score equal to its Sleaze attribute every Combat Turn.

GREP

The sprite using this power harnesses the full potential of the Matrix's mesh of attached devices to a single Data Processing task. The sprite's Data Processing attribute is increased by its Level and increases by 1 additional point each Combat Turn the power is sustained. While sustained, the sprite accrues Overwatch Score equal to its Data Processing attribute (as modified through the power) every Combat Turn.

MANGLER

The sprite using the Mangler power is done fooling around. If the sprite beats the target in a Cybercombat + Resonance [Attack] v. Intuition + Firewall test, the target must resist (Resonance) DV Matrix damage, with a few caveats. If the target was a technomancer, the damage is Physical rather than Stun. If the target was a decker or device, the device takes Physical damage (rules for repairing physical damage appear on p. 143, *Run & Gun*). If the target was a host, it is knocked off the Matrix if it takes more than (Host Rating) boxes of damage. Rebooting the host takes (Host Rating) number of hours.



OVERDRIVE

The Overdrive power allows a sprite to push a device past its limits—sometimes *way* past its limits. The sprite requires a mark on the device for this power to function. Upon activation, all the device's ratings are improved by 1. Every Combat Turn that the power is sustained, the bonus is increased by 1. This continues until the power is no longer sustained or until the device has broken down. When the bonus is equal to triple one of the device's default ratings, it breaks down and takes (bonus) damage that must be repaired before it can operate again.

SACRIFICE

Things have to be going very badly for a sprite to be willing to use the Sacrifice power. The sprite

spends a Free Action accumulating Resonance and then infuses a target persona with all of that energy. Doing so causes the target to heal all of its Matrix Condition monitor. Moreover, when the Sacrifice power is used, the target is flooded with Resonance energy, which re-routes and optimizes subroutines, creates redundancy in code, and generally makes the target substantially more effective in all ways. In addition to healing the Matrix Condition Monitor, the target receives a bonus to all Matrix Attributes equal to half the sprite's level (rounded up) for a number of Combat Turns equal to the sprite's level; and finally, the target takes no damage during the Combat Turn that the sprite uses this power.



IN THE FLOW

There is no possible way to spend a higher portion of your life online than technomancers, because there is no percentage higher than one hundred. They have all the time in the world and a lot of individuality, so that results in a full range of approaches to interacting with the Matrix. This chapter covers some of the complex forms, sprites, qualities, and echoes that make technomancers distinct. Here, then, are ways for technomancers to show how they have become true individuals.

COMPLEX FORMS

Complex forms help technomancers make their mark on the Matrix, threading up the right tool at the right time. Here are a few more tools that, at some point in time, might be the right one.

ARC FEEDBACK

Target: Icon **Duration:** S **FV:** L - 2

Arc Feedback grants the technomancer the ability to catch some of the energy of a successful attack against them and send it back toward the attacker.

While a technomancer is sustaining this form, every time they receive Matrix damage—that is to say, damage remaining after any and all resistance rolls—they roll Software + Resonance [Level] v. Willpower + Firewall of the attacker. If the test succeeds, the damage the technomancer was not able to resist is reflected back to the attacker at a ratio of 1 point of damage for every 2 inflicted on the technomancer. Net hits on the test increase the damage, and the total damage must be resisted by the original attacker. Damage reflected back on the attacker does *not* reduce the damage taken by the technomancer.

BOOTLEG PROGRAM

Target: Device **Duration:** I **FV:** L - 2

Target a device and make an opposed Software

+ Resonance [Level] vs. Willpower + Firewall test. On a successful test, the technomancer may copy the effects of one program currently running on the device for a number of combat turns equal to the number of net hits.

This complex form may not copy an agent or a program the technomancer already knows as a Resonance [program] echo (p. 258, SR5). A technomancer may only benefit from one Bootleg Program at a time; threading a new Bootleg Program complex form cancels any remaining effects of the previous one.

HOST EMULATOR

Target: Self **Duration:** P **FV:** L

Sometimes the target needs to believe that they're in a regular host doing typical things when a runner needs that target to be doing anything but that. And sometimes a little illusion is all you need to log a target's keystrokes or get their banking PINs. Whatever it is, it's always better to have a host emulator in your back pocket, just in case.

When threading the Host Emulator complex form, a technomancer makes a Software + Resonance [Level] simple test. They create a host that looks legitimate, but is not, though the pseudo-host does appear to have been created through official channels. This pseudo-host seems functional but does not store any data and cannot make or run IC.

The technomancer may attempt to make the pseudo-host appear to be a host that already exists, if they have at least one mark on that host when this complex form is threaded. Anyone entering it may realize it's not a real host by performing a Matrix Perception test, with a threshold equal to the number of hits rolled when threading this complex form.

In the event that someone attempts to hack the host, treat the pseudo-host's rating as (2 x number of hits on the threading test). If the hack is successful, the hacker gets marks on the technomancer and sees through the illusion.





This complex form may be dismissed by the technomancer as a Simple Action.

MIRRORED PERSONA

Target: Self **Duration:** I **FV:** L - 2

You can create a proxy persona that looks and acts identical to you in the Matrix. To differentiate between the technomancer and the proxy, opponents must succeed on a Matrix Perception test with a threshold of the number of hits rolled when threading this form.

If they fail to notice, opponents target the proxy with a Matrix Action. The player rolls a defense test as normal. If they succeed, the proxy disappears, and technomancer character takes no negative effect.

PINCH

Target: Self **Duration:** S **FV:** L + 2

When you're caught in the crossfire, sometimes the only thing to do is burn down everything around you.

If a technomancer is sustaining this form when their Matrix condition monitor becomes full or when they are otherwise forcibly removed from the Matrix, all icons the technomancer has marks on and all icons that have marks on the technomancer take Matrix damage equal to the level of the complex form. This damage may be resisted.

If a technomancer is removed by the fade damage from threading this form, the form fizzles and returns to the fabric of the Resonance before it can take effect.

PRIMED CHARGE

Target: Self **Duration:** I **FV:** L

When a technomancer harnesses the raw power of the Resonance, it can make any obstacle that gets in their way regret its choices.

Make a Software + Resonance [Level] test. The next Matrix action you perform gains a dice pool bonus equal to the number of hits on this test.

RESONANCE BIND

Target: Persona **Duration:** S **FV:** L - 2

Need to slow the opposition down? Snag them in a Resonance Bind that hinders all actions in the Matrix.

Make a Software + Resonance [Level] v. Intuition + Data Processing opposed test. On a successful attack, each net hit reduces the target's Initiative Score by 2. If you sustain the complex form, the target loses the same amount from their Initiative Score at the beginning of each combat turn.

A target caught in Resonance Bind may attempt to break free of the binding by making a Cybercombat + Logic [Attack/Sleaze] v. the complex form's Level x 2 opposed test. Success only means that they stop future Initiative Score loss; they do not regain any points of Initiative Score in the present Combat Turn.

RESONANCE CACHE

Target: IC **Duration:** I **FV:** L - 2

The technomancer pushes a single IC into a stream of Resonance that isolates it, effectively locking it away. Make a Software + Resonance [Level] v. Host Rating x 2 opposed test. On a successful test, the IC is locked in a Resonance fold for a number of combat turns equal to the complex form's level.

SEARCH HISTORY

Target: Device **Duration:** I **FV:** L - 2

Target a device and make a Software + Resonance [Level] v. Device Rating x 2 opposed test. On a successful test, the technomancer has a full record of the device's Matrix history over a number of days past equal to the number of net hits.



WEAKEN DATA BOMB

Target: File **Duration:** I **FV:** L - 2

Make a Software + Resonance [Level] v. Data Bomb Rating x 2 opposed test. On a successful test, the form lowers the rating of a data bomb by the number of net hits (to a minimum of 1).

WEAKEN ENCRYPTION

Target: File **Duration:** I **FV:** L - 3

Make a Software v. Resonance [Level] v. Protection Rating x 2 opposed test. On a successful test, the form lowers the rating of the file's protection (see **Edit File**, p. 249, SR5) by the number of net hits (to a minimum of 1).

TECHNOMANCER QUALITIES

Every hacker worth their salt has something that makes them stand out in a crowd. Even though cyberdecks are expensive enough to make you sell your soul for them, there are still millions of deckers out there. And that's not even taking the technomancer population into account. How does one become unique in a world where uniqueness is for sale? Here are some qualities that make technomancers true individuals. Note that these qualities (except Reverberant) can only be taken by technomancers.

POSITIVE QUALITIES

BETTER ON THE NET

COST: 9 KARMA

Being a technomancer is like being a part of two worlds, and for some, the real world is far less tangible than the digital one. When they're acting in the Matrix, they're better, faster, stronger, and they can do things that they could never accomplish in the "real" world. They are part of the Matrix and the Matrix is part of them.

When this quality is selected, the player selects a Matrix attribute. They gain a +2 bonus to that attribute. The quality may be selected multiple times, once for each Matrix attribute.

BRILLIANT HEURISTICS

COST: 5 KARMA

A character with this quality is superlative at performing complex, processor-intensive tasks. Any Ma-

trix Action that depends on the Data Processing attribute is completed in half the time. This quality stacks with other similar qualities, such as Analytical Mind, meaning the time could be quartered.

GROVELER

COST: 10 KARMA

This quality allows a technomancer to consume data stored on optical chips as a means of reducing their Fading Value when performing several tasks connected to Resonance. To do so, the technomancer must destroy several datachips. For every four datachips destroyed by the technomancer, reduce the Fading Value on the next Compiling, Decompiling, Registering, or Threading test by 1 point.

HOLD THE DOOR

COST: 7 KARMA

Hosts have a nasty habit of creating an infinite onslaught of IC. You might take one down, but there's another just waiting to ruin your day. A character with this quality has learned to adapt to this, learning how to time their attacks and create a flow to keep the IC at bay. When an attack from the character fills a persona's Matrix Condition Monitor, they get a +2 bonus on their next attack. If their next attack successfully destroys its target, the character gets another +2 bonus on the next attack. This continues to accrue until an attack fails to destroy a target or the character takes an action other than attacking.

FRACTAL PUNCH

COST: 5 KARMA

When it's time to put the hurt on someone, a character with Fractal Punch does it as hard and as fast as possible. When you use a Data Spike or Resonance Spike action, you can choose to overclock your attack. To do this, declare that you are using Fractal Punch with a Free Action prior to your attack. Doing so imposes a -4 Dice Pool modifier but confers a +2 damage bonus to your next attack.

LONE WOLF

COST: 5 KARMA

Incompatible with Team Player.

Lone Wolf characters hate to work on teams—they feel other people only slow them down. When operating in the Matrix by themselves (not counting their own sprites), they get a +2 bonus to their Initiative Score. This bonus is negated if



any ally is working in the Matrix with the character at the same time.

NATURAL HACKER

COST: 14 KARMA

Technomancers have an instinct for the Matrix, and there sometimes are moves or skills where they have a particular gift simple because they have done them so often, and for so long.

When this quality is purchased, the player selects one Matrix action. When creating a dice pool for this action, a technomancer may replace the relevant mental attribute with their Resonance rating. The Natural Hacker quality may only be taken once.

ONE WITH THE MATRIX

COST: 2, 8, OR 10 KARMA

The Resonance is so ingrained in the character that they've begun to see it manifest in their everyday life. They have reached a point where they no longer need things that are necessary for everyone else to interact with the Matrix. They are one with the Matrix, and they process it on their own.

At the 2 Karma level, the character's living persona is innately able to join a PAN or WAN as a slave to another deck or commlink (though requisite authorizations must still be obtained).

At 8 Karma, the character's living persona can act as a master device of a PAN, with a maximum number of slaves equal to the Resonance rating $\times 3$.

At 10 Karma, characters receive both effects. Characters who had previously purchased one part of the quality may subsequently purchase the other.

REVERBERANT

COST: 5 KARMA

This quality can only be taken by those who are not Emerged.

This character is not a technomancer, but there is a slight touch of the Resonance upon them. This means that even though they can't perceive the Matrix in that special technomancer way, and they cannot operate with a living persona, they receive a +1 dice pool bonus on any Matrix actions specifically directed at technomancers, sprites, and Resonance entities.

SPRITE AFFINITY

COST: 7 KARMA

The Sprite Affinity quality allows a technomancer to resonate better with one type of sprite.

This type of sprite jives with the technomancer's coding style in just the right way. The sprites seem more inclined to serve their compiler with distinction, and because of the ease of creation they tend to have fewer bugs.

When choosing this quality, the player selects a specific type of sprite. When compiling that type of sprite, the character receives a +1 dice pool bonus to Compiling tests. If the sprite is successfully compiled, the character gets 1 more task than they normally would. This quality cannot be selected more than once.

TEAM PLAYER

COST: 5 KARMA

Incompatible with Lone Wolf.

Team Players were always taught that it's good to share with others. This quality enables the Brute Force and Hack on the Fly actions to be done as teamwork tests. Only the leader of the teamwork test needs to possess this quality. The team leader determines the number of marks that will be attempted, and the resulting modifiers are applied to all participants. Agents, sprites, and Resonance constructs may not participate in this teamwork test. If the test succeeds, all participants gain one or more marks. On a failure or a glitch, the effects are applied to all participants.

TRUST DATA, NOT LORE

COST: 5 KARMA

Incompatible with Trust Lore, Not Data

This character has learned over time that their instincts can get them into trouble. As a result, they tend to trust the data in front of them rather than the gut feeling that others may rely upon. Use Logic instead of Intuition on the following Matrix actions:

- Control Device
- Disarm Data Bomb
- Hide
- Matrix Perception
- Matrix Search
- Snoop
- Spoof Command
- Trace Icon

TRUST LORE, NOT DATA

Cost: 5 Karma

Incompatible with Trust Data, Not Lore

This character has learned over time that data can be manipulated easily, leading people to make poor decisions. As a result, they trust their





gut feeling instead of what people present to them. Use Intuition instead of Logic on the following Matrix actions:

- Check Overwatch Score
- Crack File
- Crash Program
- Data Spike
- Edit File
- Erase Mark
- Format Device
- Jam Signals
- Reboot Device
- Set Data Bomb

UNIQUE AVATAR

COST: 5 KARMA

Incompatible with Digital Doppelganger.

In a world full of customization, the only limit to an avatar's appearance is one's creativity. Is it any wonder that so many people do not have truly unique avatars? The fact is that the spark that makes one truly unique is lost in many people—but not characters with this quality. Their avatar is completely unique, and they've gone to the effort of ensuring that it cannot be replicated by anyone. This gives them an edge in dealing with those who are Matrix-savvy and ensures that when someone sees their avatar, they know they are dealing with a pro. The character receives a +2 bonus in Social Tests in the Matrix when their persona is visible. The drawback is that if someone tries to remember who they were dealing with, they also get a +2 bonus to their Memory Test, and they reduce the Difficulty Threshold by 1 (to a minimum of 1).



NEGATIVE QUALITIES

BRITTLE [ATTRIBUTE]

BONUS: 5 KARMA

This character's living persona is just not efficient at a particular aspect of operation. They've tried everything to try to boost it, but they can't find the right technique to make it perform as well as it should. The player selects a Matrix attribute when this quality is selected. That Matrix attribute always functions at 1 lower than its assigned attribute level. This quality may be taken multiple times, with a different Matrix attribute chosen each time.

CODE OF HONOR: BLACK HAT

BONUS: 15 KARMA

Restriction: May never give away paydata for free; must sell the information to the highest bidder.

A true black hat hacker is everything that the corporations are afraid of: a highly skilled mercenary out to profit from their losses. The black hat is romanticized in this role by trideo shows, but the reality is that the life is hard. Getting the information is only the first part—if it's going to be worthwhile, they have to sell it afterward. After all, what good is information if you're the only one who knows it? A black hat always sells the paydata they acquire, and always to the highest bidder. They are a mercenary bunch of hackers who have little value for righteousness, because righteousness doesn't pay the bills.

DATA HOG

BONUS: 10 KARMA

Not all hackers are efficient, god-like beings of the Matrix. Data Hogs are particularly inefficient with their code, which leads to making a big ripple in the Matrix. This means that GOD can track their location more easily, leading to a reduction in the threshold for Convergence. Instead of Converging when Overwatch Score reaches 40+, the threshold for characters with this quality is 30.

ESCAPED CUSTODY

BONUS: 5 KARMA

Prerequisite: Records on File.

A character with this quality escaped a megacorporate experiment, and they have the scars to prove it. These scars are not necessarily physical, and while they've done their best to heal and move on, when faced with their former

captors they have a tendency to lose control. The player selects any megacorporation with which the character has Records on File; when dealing with that megacorporation, they receive a -2 dice pool penalty on Composure Tests.

This quality can only be taken once.

KNOW YOUR LIMIT

BONUS: 4 KARMA

The character has experienced some serious fade, and omae, they never want to do that again. But fading is a part of a technomancer's life, and past battles with it seem to have left their scars. The character suffers a -2 dice pool penalty to resist Physical fade damage.

ON THE WAGON

BONUS: 5 KARMA

Restriction: Incompatible with the Addicted, Codeblock, Wired User, or any variant of Incompetent affecting Matrix-based skills.

Winners don't use drugs! That's what you've been told your whole life, and it has been your guiding principle. Maybe you experimented with mixing drugs and the Matrix at one point and decided you hate it. Maybe you have decided that the Matrix is a confusing enough place without adding a layer of confusion to it. When you are *not* sober, you take -2 penalty on all Matrix actions.

RESONANT BURNOUT

BONUS: 15 KARMA

Whether willingly or not, the character's body has been implanted repeatedly. You may not have a lot of cyberware in your system right now, but you've had a lot put in and pulled out over time. As a result of all this modification, you treat all Resonance lost to Essence loss as twenty percent worse than normal. Fractional Resonance is rounded down.

SPIRTE COMBUSTION

BONUS: 13 KARMA

The sprites the character compiles are never as stable as they'd like. The sprites tend to break down more easily and have fewer services tied to them than other people's sprites on average. A few have even exploded into code right in front of the character's eyes. It's almost as if the character did something to offend sprites.



When a sprite is successfully compiled, the character's sprites come with 1 less task than rolled, to a minimum of 1. The character suffers a -1 dice pool penalty when registering sprites.

Taint of Dissonance

BONUS: 5 KARMA

Despite an extreme effort on your part to avoid the Dissonance, it seems to follow you around wherever you go. Not quite like Gremlins, this little trace of Dissonance has no impact on your normal day-to-day operations. However, when dealing with Resonance entities like sprites, they can sense the taint of Dissonance on you. When in any Opposed Test with a Resonance entity (such as a sprite, but not a technomancer), lower the applicable limit by 1.

'Ware Intolerance

BONUS: 15 KARMA

In a world full of cyberware, bioware, and nanoware, it seems that augmentations are nearly impossible to avoid. A character with 'Ware Intolerance, though, needs to avoid them all like the plague. Their system is especially sensitive to any kind of invasive 'ware. As a result, all Essence lost to cyberware, bioware, or nanoware is twenty percent worse than normal.

WIRED USER

BONUS: 5 KARMA

Prerequisite: Character must have the Addicted quality.

Restriction: Cannot be combined with Code-block, On the Wagon, or any variant of Incompetent affecting Matrix-based skills.

Winners don't use drugs! That's what you've been told your whole life. It was all a lie. You got that first sweet taste and decided to take it a step further by using while you were jacked into the Matrix. Now, you don't know what you'd do without the drug cocktail you rely on while in the Matrix. When you are sober, you take a -2 penalty on all Matrix actions.

SPRITES

They're not pets. They're not servants. But they sure are useful when technomancers call on them. Here are a few new types of sprites, as well as new sprite powers.

COMPANION SPRITE

Companion sprites are always by your side, right when you need them. They exist to protect and serve.

ATTACK	SLEAZE	DATA PROC.	FIREWALL	INIT.	INIT. DICE	RES
L-1	L+1	L	L+4	(Lx2)	4D6	L
Skills		Computer, Electronic Warfare				
Powers		Shield, Bodyguard				

GENERALIST SPRITE

Not particularly good at any one thing, but also not bad. They are what you make of them.

ATTACK	SLEAZE	DATA PROC.	FIREWALL	INIT.	INIT. DICE	RES
L+1	L+1	L+1	L+1	(Lx2)+1	4D6	L
Skills		Computer, Hacking, Electronic Warfare				
Powers		[Any Optional Power] x2				

NEW SPRITE POWERS

BODYGUARD

A companion sprite is a loyal friend, and just like the name, an invaluable companion in the Matrix. They will do just about anything to protect their owners if they ask.

A compiler may expend all of the companion sprite's remaining initiative (minimum 10) and tasks (minimum 1) to have the sprite intercept a Matrix attack action targeting the owner. The sprite is destroyed in the process.

SHIELD

When a companion sprite sees that its compiler is being hurt from Resonance backlash, it will open up a pathway so that it can ease the burden on its owner, taking whatever damage it can absorb.

Any time the sprite's owner would take 2 or more boxes of fade damage, they may redirect one box of damage to their companion sprite.

OPTIONAL SPRITE POWERS

When compiling, the owner may choose to give the sprite 1 optional power for every three levels the sprite has.



ACTIVE ANALYTICS

This sprite is a busy bee—in addition to any other tasks given to it, it's also hyper-aware of the threats that are just on the horizon.

The sprite monitors the Overwatch Score of itself, its owner, and all other active sprites under its owner's control. The owner of this sprite can check the monitored Overwatch Scores without having to roll a test by expending one of the sprite's tasks.

Additionally, when giving this power, the compiling character may choose to have the sprite automatically use a task to alert them when any of the monitored Overwatch Scores is greater than or equal to 35.

BORROWED IP

The sprite can expend a task to change its own icon to appear as a non-Resonance Matrix entity for rounds equal to its level. This could be a random persona, program, or device. Anyone trying to see through the illusion must succeed on a Matrix Perception (level / 2) test.

DECOMPILING RESISTANCE

When resisting a decompiling attempt, treat the sprite as if it owes a number of tasks equal to its Level / 2; these refresh every day and are cumulative with any tasks the sprite may actually owe a compiler.

ENHANCE

As a technomancer begins to thread, their sprite gifts them with just a little bit of raw resonance, boosting the form's potential.

When threading a complex form, an owner may expend a companion sprite's task in order for the sprite to raise the applicable limit by one-half the sprite's level, rounded up. This power cannot be used multiple times on the same threading action.

NAVI

The sprite can highlight objectives and paint targets for easy navigation and identification of threats. The owner can expend 1 task to add (sprite's level / 2) to their dice pool for a Matrix Perception test.

RESILIENT CODE

When a sprite is compiled, the owner may choose to expend 1 task to increase a sprite's Matrix

Condition Monitor by 2. This power can only be used once per sprite.

RESONANCE SPOOLING

Waiting for the Resonance to spool just a little bit longer when compiling a sprite always results in a slightly better sprite, in one way or another. When a sprite is compiled, the owner may choose to expend 1 task to raise a sprite's Matrix attribute by 1. This power can only be used once per compiling.

ECHOES

As technomancers deepen their relationship with the Resonance through submersion, they gain Echoes that hone their abilities. Here is a collection of new options.

AEGIS

The technomancer's connection is anchored so heavily in the Resonance that their living persona has preternatural fortitude.

This echo grants the technomancer's Matrix Condition Monitor four additional boxes that take damage before the technomancer does. Once damaged, it takes the Resonance twenty-four hours to rebuild this shield. All damage is repaired at the end of this period; it does not repair in stages.

DRAINING SPIKE

When using the Resonance to damage those around them, some technomancers have learned not to waste the energy. When using the Resonance Spike complex form (p. 153, SR5), the technomancer heals 1 box of Stun damage for each box of Matrix damage inflicted on the target, after damage resistance.

NEURAL SYNERGY

The Resonance has permeated every corner of the technomancer's brain, and synergy has started to take hold. Every time a technomancer selects the Neural Synergy echo, they increase their Logic attribute by 1. This echo can be taken a maximum of three times.

PREDICTIVE ANALYTICS

Reaching out to the Resonance while in AR, you are able to sense the potential threats from the



devices around you. This manifests itself in a tactical readout that gives the technomancer a preternatural ability to act swiftly in combat.

The technomancer's initiative score increases by 1D6 when in AR. This echo may be taken multiple times, but a character may not exceed 5D6 on any initiative test.

RESONANCE RESISTANCE

The technomancer has learned to use the Resonance as a shield to guard against other threats that also use Resonance, giving them a +2 dice-pool bonus when defending against Resonance-based actions.

THE VAN DER WAALS EFFECT

With a free action, the technomancer creates a small electromagnetic pull around them, which

PARAGON MODIFIERS

There is no cost or ritual to aligning oneself to a paragon—a few minutes alone on the Matrix is enough to call and align to one, although you must have spent at least a week without being aligned to a different paragon. Doing so will give the character bonuses to some actions in the Matrix and penalties to others, as listed in the paragon descriptions. A technomancer may only have one paragon at a given time. It's not possible to tell what paragon a technomancer has with Matrix Perception, but it will usually become obvious through the technomancer's actions.

ROLEPLAYING PARAGONS

Paragons are creatures from the deep digital realms, and although they interact with metahumanity, metahumanity has not yet rubbed off on the paragons. While they believe themselves to be clear and rational, and sensibly emotional from their own point of view, this does not always translate to interactions in the Matrix, let alone meatspace.

When roleplaying paragons, the core goals and motivations that the relationship with the technomancer is built on should be solid and reliable, but things outside those core goals, and especially things opposed to those goals are unlikely to translate well for metahumans. Which is to say that if a technomancer wishes to ask the Archivist about historic data, the interaction will probably progress easily, but if the technomancer wishes to ask the Archivist how it feels about solipsism, the conversation is likely to go off the rails quickly.

allows them to connect to ferrous metal or attach ferrous metal to them.

While active, the user is virtually incapable of dropping metal items and may move along metal surfaces at any angle. The technomancer is considered to have a Strength of 6 for the purposes of holding or attaching to metals. (Note that it's entirely possible to have more weight attached to the user than they can lift.)

WILL OF THE RESONANCE

The Resonance is more than just a tool to be used by the technomancer. It is a way of life, a way of being, and the technomancer is confident that the Resonance has a purpose for them. The will of the Resonance guides all its denizens.

Every time a technomancer selects the Will of the Resonance Echo, they increase their Willpower attribute by 1. This echo can be taken a maximum of three times.

PARAGONS

Paragons are mysterious entities that exist in the Matrix, which seem to come from the Resonance realms. Where AIs are generated from programs written by metahumanity and sprites are called forth for specific tasks, paragons don't seem to be beholden to anyone or to have come from our coding efforts. They might be the masters of the Resonance realms, or perhaps they show the future of sprites that are left to develop on their own. They seem to have arrived when we first accessed the Resonance, and they seem to have their own mysterious long-term goals and agendas.

COMMUNION

We technomancers still don't agree on what paragons are, but it doesn't necessarily matter. Whether they are a philosophical archetype, a powerful sprite, or an echo of our own Resonance on the Matrix, they are useful. A technomancer who is looking for guidance or to improve their understanding of some facet of the Matrix can open their mind and focus on their goals. Doing so can contact (or possibly creates) a paragon. When a technomancer has made contact, if they decide to align their goals to the paragon, they can benefit from advice and instruction. Choosing to align



yourself to a creature that you don't fully understand is risky, but the risk is probably no more than that of being paid by someone anonymous to commit crimes in the shadows. Alignment also makes a few tasks easier as the technomancer uses patterns and forms that the paragon has developed. Of course, when a technomancer no longer aligns themselves with a paragon, or consistently acts against the paragon's cause, they will find themselves without benefits or advice.

SAMPLE PARAGONS

We don't know how many paragons there are; there might be one per technomancer, or maybe they are all one entity wearing different masks. The paragons below are the ones that seem to be encountered the most, but there likely are more out there.

01 (THE WORLD TREE)

Zero-One is the very foundation of the Matrix. Sometimes called the World Tree, it links the deep realms with the standard data Matrix. One of the oldest and most followed of the paragons, it seems to want harmony and to maintain the flow of Matrix information, and it does this by feeding information to the right people at the right time. This is the only paragon that seems to want its followers to group up, and there are many virtual tribes who have 01 as a patron.

Advantage: If a follower of 01 has at least one mark on a target, they may act as if they have an extra mark on it.

Disadvantage: -1 limit and -1 dice pool penalty when acting only in AR.

Favor is lost if the technomancer knowingly works against another group that follows 01, and favor can be regained by advantaging that same group.

ARCHITECT (THE BUILDER)

Not as interested in the final result of what they build, the Architect is invested in the act of creation. Once the well-designed and integrated code or infrastructure is complete, the architect loses interest and moves on to their next big project.

Advantage: +1 limit and +1 dice pool bonus for Edit actions.

Disadvantage: -1 limit and -1 dice for Snoop actions.

Favor is lost if the technomancer has not cre-

ated software for a while, and it is lost faster if the last software created was not challenging. Favor can be regained with a large coding project.

ARCHIVIST (THE SECRET KEEPER)

The Archivist keeps and stores, and it is a mass of information. Sometimes known as the Secret Keeper, it seems to have endless access to all of the digital information that has ever been created. It's easiest to contact the Archivist in the Archive, but any large collection of digital information will put you in the right frame of mind to commune with it. The Archivist seeks to collect new information and digitize old records, although it doesn't necessarily dispense them freely.

Advantage: +1 limit and +1 dice pool bonus for Browse actions and digital legwork.

Disadvantage: -1 limit for Edit actions designed to destroy data.

Favor is lost if the technomancer passes up too many opportunities to archive data, although this can be postponed by spending free time in old libraries with a book scanner.

BLACK HAT (THE CRACKER)

The opposite of the Architect, Black Hat has little interest in creating new things—it prefers to take the things that have been made by someone else. Data, programs, drones, anything that can be stolen is what the Black Hat seems interested in. Oddly it doesn't seem to hoard things, more interested in the theft than what happens afterwards.

Advantage: +2 limit for gaining marks on a target.

Disadvantage: -1 limit and -1 die when setting a Data Bomb.

Favor is lost if the technomancer builds a secure system with no backdoors and may be regained by defeating a security spider in cybercombat.

DAEDALUS (THE INVENTOR)

This is an odd one. It seems to be a paragon from the deep Resonance that is fascinated by meatspace. In any case, Daedalus takes every opportunity to experiment with new machines, new drones, and other things that have been designed and actually built. It's possible that it is finding out about the physical world the only way that it knows how. In any case, Daedalus encourages technomancers to design and build drones and other devices, then get



out there and test the limits of the physical world. It also encourages the technomancer to maintain a meFeed or similar live stream.

Advantage: +1 dice pool bonus for Hardware tests, +1 limit on Pilot skill tests when jumped in.

Disadvantage: -1 dice and limit for all actions in the Deep Resonance.

Favor is lost if the technomancer deliberately and permanently cuts off information from meatspace into the Matrix—for example, by shooting a camera instead of hacking into it and disabling it. Favor may be regained by pushing more information into the Matrix, such as by hooking up a camera and broadcasting its feed.

DELPHI (THE ORACLE)

The paragon known as the Oracle is an experimenter. By collating large numbers of data feeds, it picks patterns and trends, and uses those trends to predict the future. Very good when there is a lot of data to work with, it is much less reliable when trying to work with things that have just sprung up, or which have undergone a large change. The algorithms that megacorps apply to the stock market are applied by the Oracle to everything from vending machine maintenance to national electricity usage. This paragon is an excellent friend who can give you a heads-up when there is trouble on the way.

Advantage: +1 bonus to dice pool and limit when threading complex forms.

Disadvantage: -2 modifier to the technomancer's Initiative Score.

Favor is lost when the technomancer disrupts established data patterns (by stealing a prototype without being asked to, for example), but can be regained if the technomancer reveals why they did it, and what's happened since.

INTRUSION COUNTERMEASURE (THE GUARDIAN)

As you might guess, the Guardian is all about protecting online spaces. IC backs its technomancers in a fight and protects hosts from exploitation. Popular with technomancers who are spiders, less with others. IC seems to be quite keen to stop users from destroying this Matrix the way that they destroyed the ones that came before.

Advantage: +1 bonus to dice pool and limit in cybercombat, +1 to firewall.

Disadvantage: -1 dice pool penalty when attacking IC in cybercombat.

Favor is lost when the technomancer defeats IC but can be regained if the technomancer helps to fight off a digital attacker.

PROBE (THE SCOUT)

Probe ferrets out information from the unconnected reaches of the Matrix and sets that data free. Unlike the Archivist, the Scout is not as interested in the infinite reams of existing information as it is in finding lost information and adding it to the archive. Its main focus is on isolated systems, and whether they are isolated because they are obsolete or because they belong in a high-security laboratory doesn't seem to bother Probe. This makes it popular for shadowrunners who like to be on the ground.

Advantage: +2 dice pool bonus and +1 limit on all actions when directly connected to an isolated system.

Disadvantage: -1 limit penalty when logged into more than one grid.

Favor is lost when the technomancer cuts themselves off from the grid, but regained the next time isolated information is broadcast across the Matrix.

SHOOTER (THE SOLDIER)

Combat simulations and tactical attack games have been a part of the Matrix since before the Matrix was a thing. Shooter revels in contests of strength and combat prowess, in games but also in meatworld and the Matrix. Perhaps we are the avatars and icons of Shooter, who is playing meatworld games the same way we play Matrix connected games. Whatever the case may be, Shooter thirsts for battle, however it may be fought.

Advantage: +1 bonus to dice pool and limit in cybercombat, +1 limit to all attack actions (physical and Matrix).

Disadvantage: -2 dice pool penalty and -1 limit when compiling sprites.

Favor is lost when the technomancer loses a fight but can be regained if the technomancer wins another one.





A MILLION ICONS BLOOM

POSTED BY: DEMONSEED ELITE

Techomancers have one core thing in common. Beyond that, we have plenty of differences, and like any such people, we can't resist the appeal of associating with those who are different, so long as their differences are like ours. Here, then, are some notes about the virtual tribes of the Sixth World, where techomancers can gather with others who share their talent and inclinations—and how to make themselves distinct from the other people who are sort of like them, but not really.

WHAT IS A VIRTUAL TRIBE?

When techomancers get together and work closely for a time, bonds form within the group. That bond makes it easier to get in touch with the Resonance, and it can help groups of techomancers get in touch with Paragons, entities of the Deep Resonance that can guide them.

Not all tribes are focused on hacking. Many techomancers were not hackers when they felt

the Resonance for the first time. Most techomancers eventually do learn to hack, both out of self-defense, and because hacking is just manipulating programs, which is easy when you can see the threads underneath the code.

So, if you go looking for a tribe, you will find hackers — natch — but you will also find truck drivers, stuffer-shack counter-jockeys, mid-level managers, factory workers, and Lone Star beat-cops. Most of them use their varied backgrounds to help out their brothers and sisters. One techomancer, someone I have known for years, works a day job as a sushi chef in the cafeteria of one of the Japancorps. They have never suspected her secret, mostly because she doesn't hack while at work. It must be hard resisting the temptation, but she apparently manages to keep her work and home life separate.

- Good advice for runners as well, if you bother having a day job.
- Bull

Knowing that your landlord, unemployed neighbor, barista, or hairdresser, could be a

Technomancers who join a virtual tribe (otherwise known as a "submersion group") gain some mechanical benefits.

Submersion costs $[10 + (\text{new Submersion grade} \times 3)]$ are reduced by 10 percent (rounded down) to reflect the support of more experienced techomancers guiding and helping the techomancer who is undergoing submersion.

The tribe counts as a group contact and can often source equipment or chemicals, the real-world substances that can help build materials to access the virtual.

The tribe also counts as having a tutor for Resonance skills and abilities.

Some tribes also have a paragon mentor. Joining a mentored

tribe gives all the benefits and drawbacks of having that paragon for as long as the techomancer is a member.

Each virtual tribe may have one or more strictures that it follows (see p. 110).

Leaving a submersion group voluntarily takes an hour of work with at least two members. Ejecting a member involuntarily requires an hour of work from at least half of the remaining members.

Members of a group are bound together by the Resonance; when connected to the Matrix, or in any of the Resonance realms, techomancers who can see the icon of another member in the Matrix can tell with a Matrix Perception test if the member is in compliance with the group's strictures.

SUBMERSION GROUPS





technomancer causes angst for people who already fear technomancers ... we could be literally anywhere.

We aren't everywhere.

We are, in fact, hardly anywhere. Whatever created technomancers never exactly made many of us, and then we've had purges and persecutions. It's a wonder there are any of us left, but there do seem to be a few more every year.

- Sure, "There are hardly any of us." That's just what they want you to think.
- Plan 9

HOW TO GET IN TOUCH WITH AN EXISTING TRIBE

Paranoia makes technomancer tribes hard to find. Technomancers have been chased and persecuted for years now, and groups who support technomancers openly have been stomped on by megacorps, or infiltrated by corporate intel teams, so that any technomancers a group is in contact with can be tracked down and disappeared into research labs.

It's not so much that tribes have gone to ground; more that the ones that survived never left the ground in the first place. This makes it hard to hook up with new groups, but not impossible. Some tribes seek out technomancers and try to give them a hand to survive. If you are really lucky, when you first emerge and are too n00b to properly protect yourself, one of these groups will find you, and you'll be able to join right off the bat. New technomancers tend to act in predictable ways in the Resonance, and if another technomancer is around, they will notice that someone is resonant. Deckers might not notice a new technomancer, assuming it's some kid with a cheap deck, but another technomancer will. As

long as the experienced technomancer is not a heartless sellout, they will at least send a message around that there is a new technomancer, and most will hang around for a while to protect the fledgling until they can fly. It may not last for long, it's not like we ain't got shit to do. It might even be that a sympathetic virtual tribe doesn't get the message, or doesn't have the resources to help. Sucks to be the fledgling, but the majority of technomancers didn't get help to start with, so newbies have the same chance that most of us have had.

- How many have you kept from metaphorically walking into traffic, Netcat?
- 2XL
- Enough. Some have made me sorry that I did.
- Netcat

If you aren't one of the lucky ones who got a tribe in your soy-flakes, you have to go looking. Finding technomancers is tricky, but not impossible, and when you find technomancers, there are pretty good odds that one will be in a tribe. Thing is, you have to go looking in places on the Matrix where you think technomancers might hang out, which is where everyone else thinks technomancers hang out, including technomancer hunters. Those are the worst places to be if you are a technomancer.

The easiest way to find a tribe is to do your research. You're a fragging wizard on the Matrix, so act like it, omae! Information about virtual tribes is around in posts like this one, deep in the Matrix, hidden in protected message boards. Once you know about a tribe, you can make a guess about how to contact it. When you think you've found a host where the tribe you hope to join is hanging out, the best way to extend a greeting is to send in a sprite with a message.



MAKING YOUR OWN TRIBE

Forming a tribe isn't complicated, but it can take a while. All members of the tribe must remain focused and together in the Matrix (present only in one host). Forming the group takes twelve hours, but each stricture (see p. 110) that the group chooses reduces the time by an hour, to a minimum of one hour per member.

The group must meet, promise to support the group's members, choose which strictures are appropriate for the tribe, and then spend experience to form the group. To make a virtual tribe, 5 Karma must be spent from each of the founding members, of which there must be at least three. This cost is only for the founding members, and it represents the investment the group is making. The group sticks around as long as there are at least two members. Like every digital transaction, a record is created in the archives.

When forming a tribe, a group of technomancers can ask a paragon with similar goals to join in order to watch over and guide the members of the tribe. Adding a paragon doesn't cost anything. A paragon will only stay with a tribe for as long as the tribe shares its goals. If the purpose of the tribe has started to wander, the paragon may well evaluate whether its goals and those of the tribe still align.

After the tribe is formed, the members are bound together by a Resonance link.

You may not create a tribe (or join an existing one) if you are already a member of another group.

The connection you've just made is critical, but it's not the last step. The tribe needs to know that you are on the level, and you need to know that it really is the tribe you were looking for. Typically, you will be invited to meet representatives of the tribe, and you will have to jump through some hoops to do so. These hoops are normally designed to work out whether you have an ulterior motive for joining, and to expose your identity to the tribe.

The tribe will then do some serious fragging research on your ass. Not your normal legwork, they will take a few days to probe the whole Matrix for every digital scrap you've left behind, and maybe even make a couple of trips to the Deep Resonance to find the digital scraps you thought you had deleted.

If you check out, then congratulations, you've earned yourself an interview! Some of the tribe

will meet with you in a secluded corner of the Matrix and have a big chat about what you're after, and why you're after it. This can get deeply personal pretty quick, and it's normal for skeletons and half-truths in your history to be trotted out, but this meeting is more to see whether you'll be happy in the tribe than whether your history is a problem. If it was a problem, you would never get to meet them, and it's not like most of us are squeaky clean.

If the tribe doesn't think you'll fit in, they'll normally try to get in touch with another tribe that they think will suit you more.

That's basically it. Most tribes have some sort of initiation, but it's not normally too onerous. You'll be on probation until you prove yourself, and then you'll be in. Proving yourself can take a while, but if you're genuinely into it, it won't be too big a problem. Depending on the tribe, you might have to put up with some hazing. It's weird that people who have been outcast from the rest of society out of fear would want to make being in their tribe less pleasant, but they do. In one tribe I can think of (that's you, Technomancer Guild), the humiliation is enough to make some talented technomancers quit and go solo. Way to wreck your whole point, idiots.

- It must be nice to have some backup—the closest I have to a bunch of droogs is you lot.
- Glitch
- It must be nice not to have people hunting you down for something you can't control.
- Respec
- Well ... any more than runners normally get hunted down.
- Puck

Hey, I get it, you're flush with Resonance and enjoying your own power! Why should you join with those technomancer losers when you could have a totally rad gang of virtual adepts of your own to boss around and make a splash? Why not? I say go for it—virtual tribes come from somewhere, maybe you'll make it big.

There isn't a lot that you have to do to make your own tribe. You need to get together with some other technomancers (and maybe free sprites) and then promise that you'll watch one another's backs. That's it. If you want to do some funky Resonance stuff as a group, there are a couple more





hurdles—nothing too hard, though. The main thing is that you need to get together in the Matrix and make something called a Resonance Bond. This isn't hard, just get together, write down (or dictate) what you're getting together for, and then everyone promises to do that thing you just said. That's it, but it's important, because the agreement gets archived somewhere in the Deep Resonance, and once you have it you can start to talk to paragons about whether you've got compatible views or not. Also, submersion always seems easier when you're doing it as a part of a group.

Everything else is optional, but you might think about putting some money toward the group, maybe maintain a server somewhere for everyone to hang out, where they can't be bugged by anyone else. You might also think about how public you want to be, and where you want to focus your efforts. Of course it's most important to start by

just hanging out. Where you wind up going hardly ever seems to be where you thought you were going.

Once your group is formed, you will have to deal with people coming and going, conflict and disagreements. Just remember why you formed and you'll be all right. Stay on target.

- This just looks like putting together a crew, how hard is that?
- Marcos
- Easy for you, you're an experienced gun-runner. It's a lot harder for some of us.
- Hannibelle
- There are a few of us who don't get on that well with other people. It goes against our grain.
- Cayman



GROUP STRICTURES

A virtual tribe can choose rules that each of the members must adhere to. Breaking a stricture means that the member is no longer a part of the group until they apologize and make it up in some way. This can cause a group to dissolve entirely if there is only one person (or even no people) who have kept the rules.

A technomancer who breaks one or more group strictures increases all Fading Values by one for each broken stricture, for every Resonance action that involves Fading, until the technomancer earns forgiveness from the rest of the tribe.

The list of strictures in this chapter is not exhaustive; any clear behavior can become a stricture with approval from the gamemaster.

STRICTURES

A stricture is chosen when a group forms. It is a promise from each member to act in accordance with the purpose that the group was formed to carry out. Technomancer strictures usually focus on loyalty to the group and on making the Matrix better (for certain definitions of “better”). Breaking a stricture makes the bond between members a bit more frayed and a bit more sour, and this colors every interaction the technomancer has with the Resonance. If a member breaks strictures frequently, it’s a pretty good sign that the member and the group have different goals, and it may be worth exploring different paths.

- Wait, so there are buckets of rules for people to follow? What’s the point? Isn’t the Matrix all about freedom and doing whatever the hell you want?
- Tolstoi
- You are free to join the group or not, but like many social groups, there are rules, and if you break the rules you get kicked out. That’s true for technomancers as much as for anarchists like you.
- /dev/grrl

ATTENDANCE

The group meets on a regular basis; each member must attend at least 75 percent of the scheduled meetings or they have broken this stricture. No one likes tribe mates who never come on raids.

CHARITY

The group is focused on white-hat activities. Each member is expected to contribute time, money, goods, or expertise to people who need it. The

stricture is held if the technomancer has completed at least one act of charity in the past month; otherwise, it’s broken.

CORRECTION

A tribe that chooses this believes that they have a duty to correct wrong information when they find it. There is a limit to the amount of correction that a technomancer can complete in a day, so a technomancer is not expected to correct every scrap of information they come across. Where the member can correct a significant piece of information, but chooses not to, they violate the stricture.

- I’d be surprised if anyone wrote “Grammer Pedant” into the rules of their little technomancer group.
- Riot
- That’s “Grammar Pedant” to you.
- /dev/grrl

DEED

The tribe needs something done, usually of significant size. Every couple of months, the members are expected to spend anywhere from half a day to most of a week working on a significant task for the group. Often this involves hacking someone big.

DEFENDER

A tribe choosing this stricture believes in protecting fellow technomancers. These technomancers are often the ones who answer the call when someone puts out the word for a flash tribe. A member who refuses a call for help violates this stricture. This doesn’t apply to dissonant technomancers or to technomancers who have a reputation for betraying their own.

In effect, a technomancer can safely turn down a request for aid from any technomancer who has notoriety.

DUES

Some tribes choose to maintain a private host or some other facility for members, and these cost money. Members of the tribe are expected to make a regular contribution. In place of actual cash, hacking a secure host for the tribe’s exclusive use will also fulfill the stricture for as long as the host is available.



HONESTY

The tribe believes information should be as correct as it can be. Any time the technomancer tells a significant lie or misleads someone, they break this stricture. Withholding information doesn't count as lying, but a group that focuses on honesty will probably not like it.

INFOSHARING

It is important to the tribe that information be free-flowing. The member is expected to share information about their activities, including data gained in the course of their shadowruns, with the tribe. It's acceptable to anonymize the information if it would otherwise put people in danger (e.g., runners who rat out the identities of their teammates don't normally live long), but the essential elements of the story should remain.

SECRECY

Don't talk about the tribe. Revealing anything other than the fact that you are a part of a tribe breaks the stricture. This includes telling people the name of the tribe, any of the strictures, whether it has a paragon and which one it might be, or anything else the tribe needs to keep private. It's possible to have a tribe that believes in both secrecy and gossip, but it's hard work.

SERVICE

The tribe has responsibilities in the Matrix or out of it. Members must put in several hours every week to keeping these responsibilities. This might be maintaining some store of knowledge, it might mean keeping some server running, or entertaining some AI.

- Look, the names these things have sound like they were given by the stodgiest bland wage-slave. You can guarantee they are not given names like this in any technomancer group. We've just grouped them together and removed the funky names so that we can talk about them.
- Netcat

PARAGONS IN TRIBES

Paragons (see p. 102) sometimes adopt tribes for their own inscrutable reasons. Presumably

PARAGON TRIBAL BENEFITS

In addition to the personal paragon benefits listed on p. 103, the paragon reduces noise between members of the tribe. When connecting to, or using a Matrix or Resonance action on a teammate, the noise penalty for distance is halved, as is the penalty for being in a spam or static zone.

Adding a paragon is a Resonance action that requires the entire tribe to be present in one Matrix location and takes an hour for each member of the tribe.

Removing a paragon requires a majority of the tribe to agree, and at least half the tribe to be present. The technomancers present don't necessarily all need to be the ones who agree to remove the paragon. The action takes one hour, plus one hour for each member of the tribe who is not present.

A tribe may not have more than one paragon at a time.

Whether and when a paragon decides to abandon a tribe is a call for the gamemaster. In general, a tribe should have several warnings and opportunities to reform before a paragon severs the relationship. Similarly, convincing a paragon who has left to return will require some sort of solid proof that the tribe has changed its ways. "We promise to do better next time" will never cut it.

the paragon gets something out of the arrangement by helping tribes that have similar goals. For whatever the reason, it's possible to ask a paragon to help the tribe out. Tribes are also occasionally approached by paragons for a mutually beneficial relationship. When you belong to a tribe that has a paragon as a patron, you gain all the benefits and drawbacks of having the paragon as a personal friend. If you already have a paragon that you have a special relationship with, it doesn't keep you out of the tribe, but you only get the benefits from your friend; you don't get the benefit of the tribal paragon.

One additional benefit a paragon gives is that it is easier for tribemates to communicate with each other. Perhaps the paragon smooths the way for the signal between its helpers, or maybe it gently molds the communication style of the tribe in such a way that it is easier to sync. Either way, talking with your tribemates becomes just that little bit easier.

- Are these like mentor spirits for mages? Because they sound like mentor spirits for mages.
- Frosty



- While they may look similar, mages and shamans call on ancient archetypes and spirits, established and traditional mentors, beyond the ken of our knowledge. As far as I can see, paragons just popped up a couple of years ago, and sometimes look different to different people. Not at all alike.
- Winterhawk
- Sure, and where did the mentor spirits come from originally? Your explanation sounds good, but I ain't buying it.
- Haze

One issue that sometimes comes up is that paragons and tribes often have similar but non-identical goals, and occasionally the paragon tries to push the tribe down the path it wants, rather than the path the technomancers thought they wanted. Luckily, technomancers don't often see the paragon as infallible, so they can take or leave advice, and this reduces the influence of a paragon. Of course, technomancer tribes themselves are fairly mercurial, and may well decide to follow their paragon and amend the goals of the group. They are also able to part ways with a paragon on friendly terms.

To make things more complicated, sometimes paragons push for actions that the tribe doesn't want, but afterward it turns out to be what they needed. Many tribes get it wrong, but most paragons and tribes find they have common ground, even after large and loud arguments.

Parting ways with a paragon involves using the Resonance bond that the group shares to unpick the agreement with the paragon. This is not a complicated task, but it can take a while to separate the threads that connect the paragon to the tribe. A majority of the tribe must agree to parting ways with the paragon, and at least half the tribe need to be together in a single Matrix location.

Adding a new paragon is also not difficult. This requires the entire tribe to be in one place and meet the paragon. The paragon might require that the tribe entreat or beg for it to join, or it might see the arrangement as a simple contract, or even just as a request to hang out. In any case, it will still take a while for everyone to make introductions.

If the tribe wants to move on from their old paragon, and have found another to go to, they must remove their old one before adding the new one.

Paragons can also ditch tribes that they think are not holding up their end of the agreement.

Normally there will be a long process where the paragon complains about the actions of the tribe before it goes.

It's also possible to establish contact with a paragon who has broken off an agreement with the tribe, but you need to do a lot of belly-crawling to get back into the good books for something like that.

AI IN TRIBES

- This terrifies me.
- Sounder

They aren't necessarily a natural fit, but some technomancers offer a hand to AIs, those other children of the Matrix. Artificial intelligences don't get the Resonance benefits of being in a tribe, but many of them are eager to be a part of a relatively trustworthy group of people who share time on the Matrix.

In many ways, AIs complement technomancers well. AIs can do several things that technomancers can't, especially the way they can interact with devices using their depth. The technomancers bring the ability to access the Resonance realms and sprites, things that AIs can barely understand, let alone attempt.

In any case, depending on how much the AI and the tribe trust each other, the home host of an AI can be an ideal place for a tribe to meet. If the AI isn't quite that trusting, their ability to manipulate ownership of devices is still an excellent way to get a safer and more secure home for the tribe and can cut down on the Matrix profile of many of their members.

AIs also often seem to be interested in sprites as a curiosity, and some even attempt to study them in order to find out whether an AI is a distant cousin of a sprite, or whether they are different constructs entirely. Little progress has been made. Sprites don't seem to mind the attention, but most do not have any interest in studying the other way.

AIs can be very effective advisors as well, but like anyone (other tribe members included) they have their own goals, and care must be taken that the tribe doesn't become a pawn in some larger power play that the AI is involved in.

Naive AIs also have a history of abuse, and some of those doing the abusing have been technomancer tribes. When someone easily led and eager to help is in your group, there are many



metahumans who will take advantage of that relationship. Other technomancers who notice this going on will often try to address the situation, as they may remember being in that position, but it is hard to notice and harder still to fix what's going on.

- I'm still terrified.
- Sounder

VIRTUAL TRIBES AS CONTACTS

Sometimes you might have made a friend of a technomancer, and he might introduce you to his friends. Virtual tribes are not very trusting, but if you help out the whole tribe, you can get a group of friends you can rely on. Having a whole tribe as a friend is not as reliable as having one individual person, since the people you helped out may not be the ones who pick up the phone. Even so, it is nice to know a group of incredible hackers. If you continue to help them out with small tasks—normally things that cannot be done from the Matrix—they will be able to help you out in the Matrix.

Virtual tribes excel at being an information clearing house—they are better as a group than any individual hacker is. If you are friends with a group, they will be happy to share juicy gossip with you. Specific paydata—such as the building layout for the Aztec pyramid, or the name of the lead scientist on the Evo jump-pack project—will cost you, but you can expect mates-rates. Generally, they will have already built in their best discount, so negotiating probably won't work, and you might even offend your friends by being hard-nosed on money.

Virtual tribes collect information about their central cause, but are also good sources of information about the Matrix generally, about movers and shakers in the area, about BTLs and skillsofts. Tribes are also uniquely good at examining very large amounts of bland information and coming up with patterns and root causes. So if you ask them to look at arrest records, public shipping manifests, and disease statistics, they may come back and say that two DocWagon crews are smuggling medical supplies to three particular gangs on the edge of the Redmond barrens, just from looking at all the information and picking out patterns.

FAVORS THAT VIRTUAL TRIBES APPRECIATE

Virtual tribes don't have access to everything. When looking to help a tribe out, there are a variety of things that you can do that would make things easier for them. The small selection below should be taken as a starting point.

1. Looking up information in a paper-based library
2. Repairing broken drones
3. Social engineering passwords
4. Being the muscle in a show of intimidation
5. Letting someone hide out at your place
6. Looking after the body of someone on a Resonance quest

- I've worked for worse. Normal rules apply—don't trust the Johnson if it's more valuable for them to screw you over.
- Bull
- They don't sound like they would know what they are doing, which is not good. The bullets I've taken are usually because I've worked for green Mr. Johnsons who didn't know what they were doing.
- 2XL
- Yeah, they are a mixed bag, but no one is going to be as on top of it as an experienced corporate Johnson. Unless you're working for a mega, Mr. Johnson is going to need some hand-holding. That applies to these tribes
- Bull

SAMPLE TRIBES

REPLANTING THE TREE

Talk about your secretive groups—the virtual tribe referred to as “Replanting the Tree” goes to extreme lengths to stay secret, hidden even from other technomancers. I don't know who their leader is, and I think that they actually meet in meatspace to advance whatever shadowy goals they have. The group has been around a long time, and it doesn't look like they are taking many signups. I possess some facts and rumors, and they clearly are up to something. Other technomancers have encountered mysterious and hostile Replanters in the Deep Resonance realms, apparently looking for something or trying to build something. Members thought to have been with the tribe seem focused on Seattle, especially



HEADQUARTERS

Virtual tribes are not limited by a geographic area when they meet; all of cyberspace is within their reach. Despite this, a virtual tribe will often have a server set aside for them, and usually there is some sort of secure space to store a body while jaunting around the deep realms. The headquarters listed represent the physical location of the grid that houses the host the tribe uses as their base of operations. This can be moved in an instant, just like any other host, and you should confirm the location if you are going to visit.

Secure space is often in the same city as the host, but can be set up anywhere. A tribe that has a headquarters is likely to also have access to a place near you where you can store your stuff for a while.

near Elliot Bay. They have also worked out a technique to try to deny deep-Matrix searches about themselves. I don't know how they do it exactly, but it looks like they set up trigger programs in the Deep Resonance somehow, and when the triggers go off, they turn up to discourage technomancers from retrieving any information on them. It doesn't seem to work perfectly, because some details, like the ones above, have leaked out, but there is a lot less information on them than on any other technomancer group, and considering that most of the others are paranoid introverts, that's really saying something.

I know that some of the original otaku, the fore-runners of technomancers, disappeared around the time that this group formed. I can't tell whether

REPLANTING THE TREE

Estimated Membership: 10–30

Headquarters: Physical underwater bunker, Elliot Bay, Seattle

Membership requirements: Must have had contact with one of the original AIs or a strong desire to meet one.

Strictures: Secrecy, Oath (rekindle an original AI)

Customs: Fraternity

Resources: Medium

Dues: Low

Paragon: Zero-One

Membership Benefits: Replanting the Tree has a secret hideaway or two underwater in Puget Sound for meat-security

Dominant Stream: Machinist

Roles for Non-Technomancers: None

Contact Benefits: Lucrative runs, live test subjects

er that is because they joined the group, or because they were eliminated by the group when it formed. They don't seem to be hunting down all the original otaku, though, or if they are, they haven't got around to hunting me down yet.

Replanting the Tree doesn't seem to be dissonant, just misguided, but a lot of their members have gone on to drop out and pollute the Resonance realms.

I also know that they have quietly put out live-capture bounties for people who are suspected of being head cases. No, I don't know why.

- Wait, they want to "Replant the Tree"? That will not stand.
- Axis Mundi
- There is a big difference between wanting to and being able to.
- The Smiling Bandit
- What are you old bastards talking about?
- Turbo Bunny
- I'll send you some archived files.
- The Smiling Bandit

SUMMER_KNIGHTS

It's a hard world, and some people want to do their best for the people they know, protecting them against the horrors beyond their little gate. Even non-technomancers. Hey, deep in the Resonance there could be all kinds of crap that people don't know about. Also, technomancers, like shadowrunners, see a lot of drek that doesn't make it to the newscasts. A hell of a lot of the time it's not profitable for a corporation to protect people, so sometimes technomancers have to be the unsung heroes of the wilderness. As you can imagine, protecting non-technomancers is not a very common viewpoint, but the Summer_Knights, led by ALT-Halus, go out and do just that.

The Summer_Knights are mostly made up of people who never thought they would become technomancers, and the group as a whole is more about ears on the street than deep-diving into the Resonance. As a result, they tend to make a difference on a local level. They can pick up when someone is being attacked in the Matrix and assist, but they can also coordinate people around the world to make small gestures that mean a lot to people. When paperwork gets lost in the bow-



els of a corporate monolith, or someone's family home gets zoned for a new sewage plant, or an insurance company refuses to pay out on a technicality, the Summer_Knights might hear about it. If the Summer_Knights do get involved, they talk to bureaucrats and support staff, and supplement their efforts with some friendly sprites to make things easier for the people at the sharp end of life.

The Summer_Knights also watch for Resonance creatures that are causing damage outside corporations. These can be rogue AIs, but are more often mischievous NetCats or DataRats causing trouble. The Summer_Knights try to remove the problem without violence as a first resort, but if they have to they will resort to hiring muscle. ALT-Halus has also personally been known to go berserk in cybercombat, his avatar morphing into a blender as he tears through enemy sprites.

- So, they like to do good things, but really little good things?
- Winterhawk
- Yeah, they are pretty low-key, haven't heard much about them, but maybe that's the way to stay alive? Oooooor maaaybe they are subtly building up a large subnet of favors and influence at all levels of society, so that when they make their big play, everyone who owes them will keep it secret. Maybe they have already done it! I need to check a few things ...
- Snopes

TECHNORIGGERS

The Matrix is made up of all kinds of devices. Vehicles and drones have had riggers since the Matrix 1.0 and will probably have riggers for many years to come. As we are a part of this milieu of devices, servers, nodes and drones, some of us naturally gravitate toward vehicles as well. There is a lot to be said for abandoning the flesh but still remaining a part of the physical world. The Virtual Racers want to support and encourage technomancers to embrace the physical world in shells of metal and plastic. The Virtual Racers seem to have lost one of their influential members lately, and there are crazy, spontaneous drone races happening all across the world, which look like they could be a shaking down of the pecking order. It'll settle down soon as someone, or someones, step up to lead the group, but for now it's fun to watch cleaning drones down their mops and skip along wet soapy corridors. My favorites

SUMMER_KNIGHTS

Estimated Membership: 12

Headquarters: Cleveland, UCAS

Membership Requirements: A stricter-than-normal evaluation period, during which members of the group will observe the potential recruit for months to evaluate whether they suit the group.

Strictures: Attendance, Oath, Defender

Customs: Deed, Secrecy

Resources: Medium

Dues: Medium

Patron: Alt-Halus

Paragon: None

Membership Benefits: The good feeling that you get for supporting a group that makes a change in the lives of a tiny number of people.

Dominant Stream: Technoshamans

Roles for Non-Technomancers: None

Contact Benefits: Alerting the group to areas that they can help in will earn a small reward. Actively helping the group with tasks will result in loyal friends.

TECHNORIGGERS

Estimated Membership: 40–60

Headquarters: Austin, Texas

Membership Requirements: No formal requirements

Strictures: Deed (Have a great race!)

Customs: Gossip

Resources: Medium

Dues: Medium

Patron: None

Paragon: None

Membership Benefits: A good source for rigging-based submersion techniques, they also have good contacts for buying and trading drones.

Dominant Stream: Cyberadepts

Roles for Non-Technomancers: Group is open only to technomancers. Normal riggers have their own clubs for this sort of thing, although there are more and more non-technomancer fans around. AIs are welcome and can race the technomancers, but not in ladder races.

Contact Benefits: Buying and selling drone hardware, and other vehicle-style benefits. Also, if you want to be taken on the ride of your life, you can ask them to take over your Ford Americar. Just be sure to have good insurance.



have been caught on MeFeeds (Link: [Here](#)).

The main goal of the club is to climb “The Ladder.” Each race can move the position of a technomancer on the ladder, up if they win the race, or perform spectacular feats for the audience; down if they lose, are boring, or both. It’s highly subjective, and there is constant low-level bickering that goes on all the time about what counts or not.

I bet the only thing keeping this from being a huge spectator sport is the hate-on people have for technomancers at the moment. If they become more accepted, even if it’s just by a few groups, they will probably get snapped up and formalized into a league of some sort by one of the megacorps.

This tribe has at least two AI members. They don’t compete in ladder races against technomancers but have a fierce two-entity competition between them.

THE RESONANT CHURCH

The Resonance is a really hard thing to understand. Normal people don’t get it, and technomancers only understand a little bit more than everyone else, though some have started to worship it. I don’t know if they have received some message from the Deep Resonance realms, or whether they were really worshipful beforehand and transferred their faith. All I know is that these guys think they know more than everyone else and are happy to tell other technomancers all

THE RESONANT CHURCH

Estimated Membership: 50

Headquarters: Las Vegas, CAS

Membership Requirements: Must be a technomancer

Strictures: Attendance, Honesty

Customs: Deed

Resources: Medium

Dues: Low

Patron: None

Paragon: None

Membership Benefits: Friends when times are troubled.

Dominant Stream: Slightly more Sourcerers than any other stream.

Roles for Non-Technomancers: There is currently one non-technomancer member, who looks after the HQ and serves to keep offline archives.

Contact Benefits: Support group, psychological therapy (if requested), friends.

about it, even if they don’t really seem to agree on the details themselves. The leader, Prelate Harmony, talks about Resonance in terms of the “First Fundamental” and the Harmonics. The Resonant Church has been around for about a decade, as near as I can discover, and has been growing slowly with a few dozen followers. The church seems to have a pretty high churn rate, as young technomancers join to try to get some certainty in their lives, eventually dropping out as they find their relationship with the Resonance doesn’t need the trappings of the church. Despite that, the core of the Resonant Church has been growing and reaching out to new technomancers around the world. I don’t think they have the right idea about what the Resonance is, but I give them props for welcoming new technomancers, supporting them through their traumatic early years, and letting them find their own way without malice. The church has built the largest network of personal contacts and favors of any virtual tribe that I know. The biggest risk to the group seems to be internal as the church tries to decide what their core beliefs should be and what doctrines they should follow. Nothing is set in stone at the moment, but some members of the church think that some of the established rules should become doctrine. Weirdly, for a virtual tribe, the Resonant Church leaves most of its records available in the Resonance realms for any other technomancer to find and refer to. They cut out anything that could be used to track down or hurt their members, but just about everything else is open access if you can get to the right realm.

- That can’t be it. There are more groups than this around.
- \dev\grl
- This is a sample to let you know what sort of things are out there. Groups are forming and dissolving all the time. Contact me off-board if you’re looking to make connections.
- Demonseed Elite

FLASH TRIBES

Most of the time you hang out in your hacker pod, or dive apartment, cruising the Matrix alone and living by your wits, but sometimes you come across something that needs doing. Yeah, sometimes that’s “for the greater good,” but more often it’s taking down some bastard who needs taking down, or hacking some corp that is lazy about



security. Those times you need a tribe at your back, a group to really get things done. What you need is a flash tribe.

It's not a hard concept. All you do is put out the call to friends, family, and anyone hanging about the scurrilous corners of the Matrix, tell them what you need, and then see if anyone turns up. If anyone *does* turn up, they can help you out. That's all there is to it!

You can add sweeteners to the deal to get more people along, and if you have a rep for turning up to other peoples' flash tribes, that can help. You do have to be careful to guide the tribe when it does turn up, otherwise you'll have a bunch of bored malcontents getting all up in your sensitive plan.

In theory, anyone in the Matrix could turn up, but calling the flash tribe actually builds a weak Resonance link between the tribe-mates that non-technomancers can't benefit from, and it's not like deckers can help out with Resonance-hacking anyway.

- You know, I've been around one of these things when it's all gone sideways. There was digital graffiti everywhere, avatars suddenly flipped between basic shop-bought ones and random creations from a costume shop. No one could do anything, and the rigger who was with me lost control of all of his drones. We killed the technomancer who set it off—it was pretty easy to spot the panicking person with no deck or ware. I think we did them a favor. Of course, that didn't stop the ones who had turned up to party.
- Red Anya

IGNITING A FLASH

There are two aspects to using flash tribes: calling the technomancers and guiding them. In many ways it's not unlike calling a sprite with dozens of heads.

Putting the word out can determine how many technomancers turn up, and it's not like you get to turn people away, so there might be people there that you don't expect.

To determine how many people join a flash tribe, roll the number of dice determined by the table below and add up the total (rather than counting the number of hits).

DETERMINING FLASH TRIBE NUMBERS

CALLER	MODIFIER
Caller has a charisma of 5+	+1D6
Caller has submerged	+1D6
Caller is a part of an existing tribe	+1D6
Caller gives more than ten minutes warning	+1D6
Caller gives less than a minute warning	-2D6
Caller has participated in a flash tribe in the past month	+1D6

After the people turn up, the caller has to maintain control of the tribe. This is Charisma + Leadership (number of dice rolled). If this roll is successful, the tribe adds teamwork dice to each Resonance test made by the caller and anyone else who is designated by the caller.

If the roll fails, the technomancers run amok. This is an opportunity for roleplaying out a chaotic scenario. However, in the interest of keeping things simple, this can be modelled by adding noise equal to the number of technomancers who have turned up to everyone in the area.



DIVING UNDER

POSTED BY: RESPEC, BUT DEFINITELY NOT WRITTEN BY HER

- Okay, so, I found this on the 'link of someone who came after me. Defused a heck of a data bomb to get it. It looks like some sort of "protect yourself from technomancers" guide. Thought it might be good to help us understand how people think we might come at them, so we can respond appropriately. Also, we can have a few laughs.
- Respec
- Who would write something like this? Someone who has it in for technomancers?
- Soldat
- Could be someone with an axe to grind, *Clockwork*?
- Netcat
- Sh'yeah right. If I ever wrote something like this, I'd never admit it. Or share it with you people.
- Clockwork

HUNTING TECHNOMANCERS

That title means two things. In one meaning, the first word is a verb, the second is an object. In the other, the first word is an adjective describing what the second word is doing.

In either case, you have the challenge of avoiding someone who swims in the information currents of the Matrix like they are born in them. Because they were. They have a sense for the ever-present data flow that can help them either find what they are looking for quickly or disappear in the ocean of noise.

What this means is that whatever sense of the term is being used, it's trouble. If you're dealing with technos, you need to know some of their habits and tendencies so you can close on them

or get away from them, as situations require. Here are some tips that should help.

NOTICING THAT YOU'RE BEING HUNTED

It's funny, this is the third time today that you've received a call from a telemarketer who knows your name, and how much money you have in your primary account. For a few weeks, pizza delivery drones have been delivering your food to the Humanis Policlub meetings down the block, and every time you login, you have to reset your icon to the default, because something keeps moving your virtual head to where your virtual ass is.

If you see things like this, you may have a problem. You may have pissed off a hacker. No need to panic, though, since a typical decker can only get you when you're online. Oh, your offline soy-oven is spitting out garlic-flavored orange juice? Your 'link keeps setting its timezone to Tanzania? Yeah, you might have annoyed a technomancer. Think back—what have you done on recent runs? Have you let your enemies identify you?

If you someday figure out that there's a technomancer who has it in for you, you're going to have a bunch of problems that you wouldn't have with other enemies. One thing that a technomancer has in common with a decker is that they could be sitting pretty in Europort while mucking with your stuff in south Jersey City. You've got a couple of lines of attack. Firstly, if you, yourself, are a decker or a technomancer, then you can hit them the same way they hit you. You can hunt them down in the Matrix, maybe through old-fashioned leg-work, maybe by looking at their meFeed, or whatever you come up with. Then you can ambush their icon and smack them till they cry. Of course, the fact that you've made an enemy of them and haven't eliminated them already might mean that they are a better hacker than you, in which case





hunting them down in the Matrix will probably be like a chihuahua attacking a doberman. Don't abandon everything Matrix, though—there are still good leads that you can track down and information that you can glean. It's just that this may not be the time to go in with virtual guns blazing.

Unless you have an army.

Let's be honest, you probably can't afford a hacker army, but it would be a very effective way of tracking down and killing an enemy hacker. You might also consider bringing in a technomancer of your very own. Ain't nothing better at destroying sprites and technomancers than another one, it's not like there is a big sisterhood or brotherhood of these bastards. You'll probably be able to find and hire one that is willing to fight another, so spend some of that cash stockpile, work out which grid they hang their hat in, and go in with friends—as many as you can afford.

A better idea than going after them in the Matrix is to attack their weak, fleshy meat. Technomancers spend a lot of time in the Matrix, and while they are not necessarily weaklings, they will go down in a broken bleeding heap to someone who keeps themselves in peak physical condition. It's often not even that hard to find out where they live, if you have the right contacts. Anyone who is skilled enough to come after you probably has a reputation, and if they have a reputation, you can use that to track them down. The hard bit is actually getting to (say) Singapore without them noticing and either hoofing it or preparing some sort of nasty surprise for you while you're in the air. Remember that this person has it in for you, so they will probably notice if your name crops up on an international flight path. They might even notice if you get a taxi to a nearby bus station. Best bet is to spend the extra nuyen and buy the services of a coyote to get you to where you're going. You can remain under the radar by being extra careful. Disguise your face so that cameras

TRACKING DOWN AN ENEMY TECHNOMANCER

A technomancer enemy is, naturally, most likely to be encountered in the Matrix. If you want to prepare your defense or ready a counterattack, it first helps to know where your adversary might be. For this, there is the Trace Icon Matrix action, p. 243, SR5, repeated here for your convenience.

TRACE ICON

(Complex Action)

Marks Required: 2

Test: Computer + Intuition [Data Processing] v. Willpower + Sleaze

You find the physical location of a device or persona in the Matrix. After succeeding with this action, you know the target's location for as long as you have at least one mark on the target. This doesn't work on hosts because they generally have no physical location, or IC programs because they are confined to their hosts.

If you are unable to gain two marks on the target, you will have to use good old-fashioned legwork. Remember to use appropriate modifiers to any rolls made; for instance, the Distinctive Style quality adds +2 dice to tracking down the person who has it.

have a harder time recognizing you, put a stone in your shoe to give yourself a limp, travel on your feet, or buy a bicycle or something, and while you are going to need a commlink of some sort, get yourself a new one. Seriously, leave your main 'link at home (or with a friend, so it still looks like it's moving about), and buy a cheap model without a camera when you get there to talk to your friends back home. Then ask around for someone who matches the description of your bogey, buy a few big guns (in case they have drones), turn off your wifi, and go kick down a door and pop some grenades.

I hesitate to mention it, but if you don't want to go to all that trouble, you could go for a non-violent solution. If you know who the technomancer is, you might be able to get a friend to talk to them and pressure them into backing off. One good way to do that is by making friends with someone close to them, or bribing someone close to them, and then seeing what it would take to back off. To be fair, if you really have fucked them over, you might have to try to undo whatever it was that honked them off. Whether this is worth your time and money is a decision that you'll have to make,





but you are definitely going to have to end the vendetta somehow, and those international flights really add up.

HOW THEY FIGHT

If a technomancer is coming after you, here's what they might do in different situations. Forewarned is forearmed.

COMBAT TACTICS

This part is pretty simple. If you're facing a technomancer in combat, you should expect them to use the same tricks and hacks that other hackers use. They might mess with your decker, turn cameras on, activate fire-suppression systems, or reboot your smartlink, just like a decker would. Technomancers can also get their sprites to mess up your gear. Basically, if there is something wireless in the area, expect it to be weaponized against you.

TACTICS AGAINST OTHER HACKERS

DECKERS

Technomancers are dangerous to everyone, and deckers are no exception. Deckers have the advantage that they can protect against direct attacks from a technomancer, and they generally have similar strengths and weaknesses. The risk for a decker is that the technomancer will use sprites and Resonance weirdness to mess with them. In most cases, the way to protect against that is the same way that you protect against any other Matrix threat, which is to step your hot-sim down to cold-sim or even hack using AR. You won't be as hot in the Matrix, it's true, but you won't fry your brain when someone surprises you with a data spike to your head.

RIGGERS

Riggers are not well placed to fend off technomancers, especially a technomancer with time on



their side. There isn't much a technomancer can do to a rigger who is jumped into a drone or a vehicle, but it will be a real pain to find your cloud of drones has turned on itself, or your helpful backup Doberman has decided it doesn't like your team coming near it. Protection in this case means fully powering-down drones that you aren't using, until someone manually switches them on, and being jumped in as much as you can.

TECHNOMANCERS

Two technomancers fighting is something to see, as they have similar strengths and weaknesses. It's a skill contest, a race to see who can track the other down fastest, maybe even an epic struggle in the Resonance realms. What you don't want to do is piss them off so much that they sell you to a corporation. It takes a distinct lack of morals to do that, but then again, this is the world we love in.

WHAT THEY WILL DO TO SOCIAL PEOPLE

Technomancers can be charming, and they understand some of the strengths that other social people have. They know that some people have networks of loyal friends, a winning personality, and a flair for social interaction. If you are one of these people and you've made an enemy of a technomancer, you can expect them to either hit you where they think you are weak—or where you are strong.

Technomancers who want to hit you where you are weak will eschew anything subtle. They will hire private detectives to find out where you live and then drop your address to Lone Star with an anonymous tip, usually based on whatever public crusade the Star has going on at the time. If the TM thinks they can hack you, they will do that directly and quickly so that you don't have time to call in your friends to help protect you.

So, how can you prevent an all-out attack? Your strengths are talking to people, so try to make friends with the very people that the technomancer is trying to use to get to you. Make sure you have friends at the Star who can catch that sort of thing and make it disappear, and try to send a few bottles of scotch to nearby private eyes. It isn't a guarantee, but they are trying to use these people as tools, which means the best thing you can do is to take those tools away from them. Of course, if the technomancer is sending kill instructions to Renraku Samurai instead of the Star, you have different, possibly bigger problems.

If your enemy technomancer is trying to hit you where they are strong, they will probably attempt to trash your reputation. With their sprites to help them, a technomancer can become a one-person propaganda machine. By hacking into dozens or hundreds of meFeeds and other social accounts, the technomancer can manipulate the news to show you committing crimes or doing other scandalous things. The original owners of the feeds will probably complain and delete their posts, but no one reads retractions, and by the time the original stream is gone, dozens or hundreds of people might have seen it. It can be impossible to get work as a personal facilitator if you've got a reputation as "The Streaking Candy Stealer" or as the person who can't open a door correctly.

And how do you protect against that sort of thing? Well, the first thing to do is realize that in some cases, any publicity is good publicity. Use your new reputation as something to build on. It might not be glorious to be the person who was caught on camera doing something intensely biological, but it will get your face known. You should front-foot your friends and contacts to make sure they know it's fake, and forward any corrections to them as soon as you can. The other thing is to change up your appearance and see if you can't distance yourself a bit from the images and videos in the wild, so that new people you meet don't immediately recognize you.

If you follow these steps, you will still be affected, but the technomancer won't have destroyed your life. And you have an avenue you can follow to improve.

WHAT THEY WILL DO TO PHYSICAL COMBAT SPECIALISTS

Technomancers aren't usually so hot in combat that they can be a straight-up threat to gilletes and street samurai. Some of them are okay in a firefight, don't get me wrong, but anyone who isn't on the bleeding edge won't be able to stand toe-to-toe with someone as good as a martial-arts adept. So, what will they do then? Mostly what a decker would do.

Technomancers can play in a whole different world from the rest of us, and they will work where it is hard to get back at them. They have a variety of options. If you rely on cyberware, they will try to get a sprite to inhabit your system, telling it to lay low until you are really in trouble, and then mess with you by rebooting your cyberware or turning off your smartlink. They can go small with things that look like bad luck, or they can go large and attempt to fry anything that draws power.



If you don't rely so much on 'ware, then odds are still pretty good that you use commlinks, smartlinks, or even grenades. Anything that has a chip is vulnerable to having a sprite inhabit it. You might think yourself safe with your manually activated timed grenades, but I've seen sprites change the air-burst distance from where a target is to millimeters from your own hand.

The best thing to do to protect yourself is to get your gear looked at by a hacker you trust. If you have a pet technomancer of your own that you can trust, that's ideal, but even a normal deck-jockey should be able to ferret out sprites lurking around your system. Once you've identified them, you should be able to work out what to do with them. Most of the time, sprites have very specific orders and won't do anything to contravene those orders. So if you drop your bandoleer of grenades into the ocean, the sprite will sit there diligently watching them under Puget Sound. Figure out their logic, then use it against them.

SPECIFIC TARGETS

In addition to the general things they can do to wide groups of people, there are tricks and traps that might apply to people in specific situations, where they can really let their special techniques shine.

CORPORATE TYPES

Have you sold out to the man? Remember that corps have as much loyalty as a rabid juggernaut on a bad day. Corp wageslaves are vulnerable to having their corporate records messed with, and a technomancer could sleaze their way right into your HR division. Make sure you've built a network of contacts in the business to alert you when things get weird and protect you should the corp host start spewing out troublesome info about you.

MERCs

Mercs live and die by their reputation. A multi-sprite smear campaign can wreck a promising career, and a technomancer who has put some weird Resonance gremlin into your Thunderbird is going to wreck more than your next contract. If you're hiring on to a merc squad, make sure they have a hacker who is regularly checking things over. And who knows what they are doing.

SHADOWRUNNERS

Shadowrunners are difficult targets for rogue technomancers, since we are often paranoid and usually leave

a very small Matrix signature. It's generally our friends who will feel amy heat someone might be trying to direct our way. To find work, we need to work through contacts, and that means people are talking about us. Since we are hard targets, it's our contacts, our fixers, the Mr. Johnsons that pay us, the cyberdocs that keep our gear intact—all these people are vulnerable to technomancers. That said, while it's unlikely that the technomancer will kill these people, they can ruin their lives, and that might be worse in the long run.

ACTIVISTS

Activists are really only vulnerable to one thing: lots of video footage of them looking like hypocrites. If they are meta-rights people, then videos can be flooded out of them at Humanis meetings. If they are Terra First, then there are dozens of videos of them burning down forests. This is bad, but activist friends will probably know better than to believe fake video, since they've probably had things faked about them in the past. It's just how the game is played. Your reputation will take a hit, but if you work your contacts appropriately, you won't be down for the count.

CRIMINALS

If you're Yakuza or Mafia, or even just a regular cat burglar, you fall into one of two categories: Type one is the more amateurish criminal, who didn't cover their tracks well and doesn't secure their online presence appropriately, leaving them vulnerable to being exposed to the authorities. Technomancers can make mincemeat out of this type. Type two is more professional, connected to an organization that has its own skilled hackers, and able to protect themselves. Technomancers will have a harder time turning them over to the authorities, because they're always watching for that sort of thing. A lot of times, the TM attacks directed their way just bounce right off. If you have people in this group that you can trust, they can be a good port of call for other people who are in trouble with technomancers.

COPS

It's probably not going to come up much for anyone reading this, but technomancers can play havoc in the lives of cops. Some of the tricks they can pull mean that there is no forensic evidence they were even there, and if your body camera is anything less than cutting edge, they will just sit there, doctoring footage to make you look like the dirtiest cop ever.



They might show a lot of patience, not even bothering to report their fake evidence to anyone. They'll just wait till internal affairs does one of their random audits, and they will see all kinds of nasty happening, and unless you can get a hold of some independent footage of the scene, no one will believe your side. In some ways this can be much worse than killing you—it gets you out of the force with a dishonorable discharge, putting a brutal end to your career and any other related job possibilities. If you are the type to really believe in what you're doing, your life is pretty much over.

ENEMY PROFILES

Just as tactics might vary based on who a technomancer is going after, a technomancer's mindset and approach might change based on their own background. So we'll look at a few different types of technomancers and how that might affect their tactics—whether they're coming after you or vice versa.

RUNNERS

If your enemy technomancer is a shadowrunner, you may be in for a world of hurt. Shadowrunners are highly competent, many of them can be persuaded to hurt or kill people for money, and any runner worth their salt has a few people that they consider to be reliable around them. This makes hunting down the technomancer very risky, and it also means that they may be able to put together an honest-to-god strike team to take you out.

This is bad for you.

To haul your hoop out of the abyss, you will have to be careful, but there is one vulnerability that a team of shadowrunners has: money. With a big enough bribe, you could convince the rest of the team to back off, or even to turn against their pet Resonance monkey. You need a lot of cold hard nuyen to pull that sort of thing off, but if you do, the feeling is indescribable. The expression on the faces of people who are turned on by those closest to them makes all the effort worthwhile.

DISSONANTS

Dissonants are crazy, even more than normal techno-heads. I don't know much about Dissonance, but it seems to me like every dissonant technomancer has some sort of mass-murder plan, even if they haven't pulled it off yet. This is your advantage, but also a weakness. If you don't know just how your target's

mind is malfunctioning, you can't predict their actions. Dissonance also makes them more powerful, or maybe just more willing to unleash that power, regardless of the possible cost to themselves. They tend to rely on it so much that it can be your advantage, because in that, at least, they are predictable. First of all, know the nature of Dissonance attacks and how to defend against them, at least enough so that you don't get overwhelmed by the first wave. Second, know that they have no power over weapons without a Matrix link. Use those to stop them—fast.

CORPORATES

Technomancers and corporations have a dicey relationship, thanks to all the questionable research activities they have used them for. Of course, both this research and their basic observations have shown them the power and utility of technomancers, so many of corps have become increasingly eager to hire them. Technomancers, understandably, have not always been lining up to work for the corps, partially because they are worried that they are one bad performance away from having their skull carved open. Still, if the corps know anything, it's how to throw money at things they want, and some technomancers aren't above being lured by that particular siren.

A corp technomancer is going to have lots of assets at their disposal. One big asset is corp security—corps are careful to protect their investment, and they often have put a lot of money into their technomancers, so large people with guns will often be nearby to help them with whatever they need. They also might bring in some magic support. They also have all the big data their parent corp has access to, making tracking and identification easier for them than it is for us. Point is, whether they are on the offensive or defensive, these technos are poised to cause you trouble.

All of these resources, combined with the influence corporate culture, tend to make them more cautious and deliberate in their actions, making a plan rather than rushing into a situation. On the negative side, this means when they launch their plan, it usually comes with optimized complex forms, a brutal contingent of sprites, and other actions that will make your life miserable. On the positive side, if you act quickly and recklessly, you have a chance to mess with them before they get their full plan together. And isn't being fast and reckless at the core of what you people do?



INFINITE REALMS

POSTED BY: NETCAT

We've detailed some parts of the Resonance realms before, but one of the tricks to a place that seems to be infinite, or at least as close enough that it might as well be inside out, is that there are perpetually new places to explore. I'll run down some of the places I've encountered or heard about lately. Dive in!

TOMBSTONES

One of the Resonance realms I've been to recently that I have no real desire to revisit is a place called Tombstones. It seems like every program that has run in the past but is no longer supported, is obsolete, or has been replaced by something superior has come to rest here. The realm looks like endless rolling black hills under a starless black sky, where black and white tombstones contain the last output that these dead programs ever produced. The size and ornamentation of the tombstones seem to be related to how popular or widespread the program was. Some hills have hundreds of tiny plaques celebrating "Hello World" programs, while other hills may have just one large, forbidding sepulture to a piece of accounting software that was once used across the world but has now faded into history. Near the edges of the realm are graves where the programs they are attempting to contain are not quite dead. Error messages and other failures slowly update on the headstones, slowing down as the last few machines running these dying programs stutter and fall silent.

Despite the fact that these programs have displayed their final output, there is still valuable information locked away behind obsolete interfaces and dead terminals. For the technomancer willing to put in the work, it's possible to find all kinds of embarrassing or revealing information with a little bit of digital necromancy. In the Sixth World,

where creative accounting history is almost a field unto itself, there are many financial trails that are digitally massaged so that they look innocent. Often old records can reveal the beginnings of data trails that can lead to criminal convictions, loss of employment, or a large dip in share values. This realm is a popular spot for technomancers who are looking for historic data, who are feeling nostalgic, or who are looking for a particular program they may have used or coded in their youth.

The sprites who haunt this realm often seem to take on familiar human shapes. Often they appear to take their appearance from people who died in the various Matrix crashes, or who were the subject of virtual personality experiments. Small in numbers, a heartbreaking group of sprites appear to be modeled on technomancers who have died in corporate experimentation. None of these sprites seem interested in talking about any former lives they might have had; they only seem interested in keeping weeds off the burial sites.

There are a few technomancers who come to try to find friends or family who have died in Matrix-related experiments, with some success. The sprites don't seem to mind having people come and watch them, although it can be tragic when a technomancer prefers sitting and watching the e-ghost of a dead lover. Sometimes people become so absorbed watching their loved ones that they neglect their own body. Perhaps there are family groups of e-ghosts wandering the black hills.

That whole thing creeps me out. It puts the consequences of anti-technomancer bias in my face, and their mournfulness feels like failure to actually live. It offers emotions I have no desire to feel.

- As with so much of the realms, the problem here is the ratio of available data to useful data. For every financial program buried here, there are like a thousand endless runner games. And for every set of numbers that reveals





some past shenanigans, there are ten thousand sets of numbers that offer no useful information whatsoever. If you have no tips on where to find something useful, you'll start to see how finding a needle in a haystack can feel like a comparatively easy task.

- Icarus

KERNEL PANIC

It can be pretty mind-bending being a technomancer sometimes—using your brain to interact with the Matrix goes against everything that metahumanity has been trying to do for as long as we've been around. Twisting your brain around the metaphors and underlying structure of the Resonance is something we grow into, one piece at a time. Every time we gain another piece of insight, we grasp something that can help us understand things at a deeper level.

That doesn't seem possible with the realm that has been called Kernel Panic. My friends and I have a theory that Kernel Panic is raw, unfiltered Resonance, unshaped by anything—simple and honest. In any case, visiting Kernel Panic is a confusing experience. At first, there doesn't appear to be any sculpting for the realm—colors, scents, and sounds combine in a bright welter of sensory information. If you can stand to stay for a while, a kind of order in the randomness emerges. Patterns shift and reverberate through different timescales. One moment you can see what looks like a sprite being assembled or born; another moment there is a series of discordant rising tones and the strong smell of vanilla drifting by while part of the fundamental essence of a complex form drifts past.

At this point, many technomancers drop out of the experience, overloaded and overwhelmed. I know that the first time that I visited I needed a bit of me-time, so I stayed in the meat world for a while. The funny thing is that the weird sensations and patterns stuck with me for a while. I couldn't

stop thinking about them, and when I had worked through them it felt as if I'd solved a complicated equation while sifting through my own emotions. At that point, I noticed that the Resonance seemed easier to use, flowing with more clarity around me.

Technomancers who are looking for more information about themselves and the Resonance may find that Kernel Panic helps them. I've heard of a lot of people who haven't got anything from the experience, but then I've never heard of anyone who has gone dissonant because they visited the realm. It's a popular destination for technomancers wanting to submerge.

- I went and had some similar experiences to Netcat the first time. I loved it, and I decided I would go back regularly, treating it as a sort of meditative spot. It was great the first few times, but I noticed the calming effect started steadily declining. I don't know if I was building up a resistance or something, or if I was just getting used to the weird patterns. I found myself wanting to find a way to get that initial sensation back, and that feeling tends to make me nervous. So I went cold turkey.
- Hexatite
- Probably just means you need to work harder to maintain your focus. Or the realm is working to drag you under its control. One or the other.
- Puck

THE FACTORY

Each time a technomancer visits the Factory, they enter a side access door into a huge building. Looking across the Factory floor, you see sprites assembling other sprites out of Resonance. Huge crucibles of molten data swing high above, dripping and splattering hot raw Resonance around the feet of anyone in the vicinity. As you progress through the building, giant robots are created alongside tiny creatures, and all of them are transported off into a hazy orange



glow that permanently rests just outside the windows of the building. The smell of scorching metal and ozone is everywhere. As you walk further and further, it becomes apparent that different areas of the building specialize in particular kinds of sprites and Resonance critters. It's not clear whether this is the place where all sprites and data constructs are created or only some of them, or whether the realm serves as an example of how such things can be made. I saw a spirited discussion on one message board arguing that this is the place where sprites go for repairs when they de-rez.

Certainly there seem to be a lot more sprites created here than ever seem to make it out into the Matrix.

- As far as you know.
- Puck

On the other hand, who knows where sprites might go when they've been made? One thing is clear about this place—if you are looking for information about compiling or registering sprites, this realm has a lot of useful data. It tends to be a bit on the clinical side, which might well represent how metahumanity is learning about technomancers, sprites, and the Resonance.

You can get some information by observing the construction processes, but more useful is finding and talking with a floor supervisor. Skilled and resonant technomancers even get to talk to the Factory Foreman. The supervisors are a little work-focused, but they're usually willing to talk and can provide interesting insights into just how things are being assembled. The Foreman always carries an air of harried work overload, and it can be tough to pin him down for a conversation of any length. Flash a little Resonance-shaping skill, though, and he'll be more likely to slow his pace and have a few words. It's not at all clear who the Foreman reports to, or if there is even anyone who is higher up the food chain. In any case, having skilled sprites walk a technomancer through the processes they use teaches a lot about how to interact and deal with those beings.

Sprites are everywhere in this realm, as are construction hazards and fast-moving delivery vehicles. Health and safety are treated seriously, but it's not like technomancers and sprites are hurt by the same kinds of things. There is very little malice here, but accidents do happen. Watch your step.

- A rookie mistake is keeping your eye only on the raw materials, thinking the danger comes from spilled molten metal or something, while ignoring the finished sprites. The sprites here, though, exist in varieties I have never encountered, and some are feral and quite mean. You might stroll by a sprite under construction that decides to take a bite out of you the moment it gets finished. Danger can come from anywhere.
- Respec

CRUFT: MISC. FLOTSAM FROM SOCIETIES

Some of the Deep Resonance realms are harder to describe than others. Where most realms have a door or some sort of portal to open, in order to enter Cruft, you must push through a clinging, sticky matted mass of fibers. Once you make it through the first bunch, each step you take in the realm involves wading through deep masses of cotton-wool material, which clings and sticks. Pick up these fibers, and you can see all kinds of memes, viral images, and videos sliding along the fabric. Repetitive musical earworms gently tinkle through the air, as if being played somewhere far distant. The longer you stay in the realm, the more alone and isolated you feel, but picking up and watching the pictures and videos can ease the loneliness for a while. I find it hard to stay focused here—if I didn't have shit to do, I could see myself wasting hours and hours watching various rodents or geometric repeating patterns. Different parts of the realm seem to be dedicated to different types of material, where one section might be mostly pictures of politicians crossed with animals, another might play repeating tunes, and yet another might show variations on the simsense three-emotion reel.

There are not a lot of reasons to visit this realm for serious work, but there are a few useful pieces of information buried in the masses of cute animals. If you're looking for something catchy to distract a group of people, you could do worse than to find a fitting meme buried in the Cruft. Probably more useful is the fact that it's possible to get a gauge on how groups of people are feeling based on the material passing through this realm. If you want an idea of who might be getting a groundswell of support during an election, or if you need to work out what might be most damaging to a corporation, it's possible to get inspiration here. Some technomancers also come here to numb the pain of ex-



istence—when the meatworld is home to people who hate what you are, it's nice to just get out of it for a while. As you might expect, coming here can be habit-forming, even dangerous if you stay long enough that your body experiences symptoms of neglect. Fortunately, most technomancers eventually manage to tear themselves away.

- As with most of the Resonance realms, the trick here is that there is a mass of data, and you have to figure out what it means. Yes, you'll see pictures and videos, and you'll get the sense of what some people are thinking about—but which people does the thread you're looking at represent? There can be clues in the strands of fabric you'll encounter, but these clues can be tricky. Is that tartan plaid you're holding representative of some group of Scots, or executives who make Scotch tape? Does the dragon-scale pattern you see represent a particular dragon? The Draco Foundation? Saeder-Krapp? If you want to use the information you find, a guess is not good enough.
- Netcat

OUT OF BAND

In the cracks between the other Resonance realms lies the raw networking that links the realms together. Not so much a realm itself, Out of Band is a pathway for moving between different realms. As you squeeze yourself into the realm, you feel yourself pulled at high speed through tunnels made of light. Most of the time this will last for a few tenths of a second before you arrive at your destination. Technomancers often feel that this is just the process to get to the other end, but if you are prepared for it and ready to hold on, it's possible to keep yourself in the stream and stick in the pipe. On the edge of the information flow, shapes, sounds, and other sensations flow past. If you reach out, millions of independent fragments of information flow through and around you, creating a confusing torrent of raw data.

Out of Band makes a good place to meet other technomancers, sprites, and other denizens of the Resonance, and technomancers who spend any reasonable amount of time in this realm generally find it easier to connect to the Resonance. It's certainly easier to communicate with paragons here.

Unlike many other Resonance realms, Out of Band doesn't store information—it's a conduit, not a repository, but some information from meat-space seems to travel through Out of Band to get to the other realms. I haven't heard of anyone who



has done it, but if you wanted false information planted in the realms, you could theoretically snag and alter it as it travels to its final destination. It's difficult for one technomancer to attempt, but a reasonably sized tribe could potentially do a good-enough job to deceive even other technomancers. And if it's theoretically possible to alter this information, you can bet a megacorp somewhere has already tried it. Let me know if you find proof of alterations, as there are lots of people who would be interested in data like that.

- Ready to go down a rabbit hole? The theory is that the Resonance realms records every bit of Matrix data, ever. And what happens in the Resonance realms counts. That includes Out of Band. So if someone changed a document while here, the original document and the changed document would be saved somewhere. So you could find both. Good luck with that—and determining which is the original and which is changed.
- Hexatite

HUMAN MALICE (DISSONANT REALM)

Where many technomancers visit Resonance realms in order to learn more about what goes on there, or to create strange and unusual code, there are other realms that do not have those kinds of positive effects. These other realms swirl, not with chaos (well, not *just* with chaos), but with malevolent and dire information that can harm any data and personas that tread unwisely. Sensible technomancers don't visit these places, but if you are very quick and careful, you might survive long enough to get out, and maybe cut the cord for a while to recover. Many people who visit these realms descend into madness and Dissonance, so these places are called Dissonant realms. We're still not sure if the Resonance is one big ball of information with Resonant and Dissonant parts, or whether those two sources are related but ultimately separate. Or if they are something entirely else.

One realm that a friend has reported on doesn't really have a name, but I've taken to calling it the realm of Human Malice. If the Endless Archive is where every bit of information is stored carefully for the future, Human Malice is a hot, sweaty shack of revenge porn, doxxing information, online blackmail material and so on. Human Malice probably repeats some of the same information that the Endless Archive has, but where the End-

less Archive has secrets carefully nested away under glass, Human Malice has insults, angry texts, heated invective, and video footage that people wished did not exist. Information on explosives and chemicals plaster the walls. The denizens of this realm look like twisted caricatures of humans. Distorted, sweaty sprites dressed almost exclusively in deteriorating rubber and split leather. No two of them are alike. It's hard to know what the beings of this realm do, as no sane individual has stayed long enough to find out, but it's unlikely to be good. There may be a paragon nestled deep in Human Malice, but I wouldn't want to see it.

REVERSING THE CURRENT

POSTED BY: PUCK

Let me tell you a story.

Once there was a young man who lived in a kingdom that was broken. There were dozens of mud huts surrounding a grand castle, and of course the mud dwellers were never allowed into the castle. Scents of wonderful food sometimes drifted out of the castle's window, and occasionally a carriage with plush velvet seats, pulled by horses as tall as two men, moved to and from the castle. The mud dwellers had a hint of the grandeur that was close by, but it was something they could never touch.

The man, understandably, became bitter at this whole situation, and he decided to storm the castle and get some of the riches it held. First, he vowed to climb the wall, but he was met at the top by guards who rudely threw him to the ground. Then, he decided to tunnel under, only to find the foundation went deeper into the ground than he can imagine. Then, he decided to rob one of the carriages. And he actually succeeded, stealing away a small bag of coins and enough food for a full meal, which he shared with his family. It was the best meal they had ever eaten.

The next day, guards from the castle emerged, found the man and his family, and killed the entire family. The man, they left alive.

After that, his only goal was to burn the castle down.

Is that man me? It has been, sometimes. Not all the time. I'll bet it's been a lot of you, too. I mean, isn't that what we're doing here? Seeing how much damage we can inflict on the fortress the



powers of the Sixth World have built? And trying to do it without bringing harm to the people and things we care about? We know the feeling.

What we are trying to do is decide how much to burn down, and who should survive the carnage.

- I'd be somewhat creeped out by this and objecting to Puck's presence on this board if I didn't have a part of me that totally understood what he is saying.
- Mihoshi Oni

And so we have Dissonant technomancers. In some ways, they're like toxic shamans, who have given themselves over to the forces that would tear apart the world and have thrown their souls into channeling dark destruction. In other ways, they're not like anything, because we do not have the words for all the things they do. Or to describe the tools they use.

We know they channel Dissonance, but what does that mean? We're still figuring out what Resonance is, and Dissonance is even less clear. Is it the anti-matter to Resonance's matter? Is it a somewhat different wavelength of Resonance, where sometimes it can amplify Resonance, sometimes it can flatten it in destructive interference, depending on how and where it hits? Is it another force entirely that just happens to be able to interact with Resonance? I don't know. I don't even know what the Resonance is. I just learned how to use it.

And some people are learning how to use Dissonance.

I don't believe I can talk about Dissonance streams the same way I can about Resonance streams. The Resonance is wild, but it also has ... well, "flavors" doesn't seem like quite the right word, but it's also not entirely wrong. The streams are discernible.

Maybe the streams in the Dissonance are discernible, too. I'm not willing to stare at them long enough to find out. What I have seen, though, is how people use the Dissonance. I've seen what they do, and to me and a number of other TMs I've talked to, there seem to be certain patterns. These aren't tribes or anything—these are just ways of describing tendencies we've seen out there and putting people into groups based on this behavior.

MORPHINAE

This name came from an insect-loving friend of mine. She named these people after a lovely group

of butterflies that are usually dark blue, black, and purple in color. Some of them flit from flower to flower; others fly higher than tree tops. She liked this name because it fits some technomancers who treat Dissonance like a toy, something to bat around and see where it goes. They have not fully submerged themselves in the Dissonance, but they don't have their feet planted on the ground. It's not clear where, or if, they will land.

The biggest danger with the Morphinæ is they are experimenting with something neither they, nor anyone else, fully understands. When they try to weave a complex form or summon a sprite out of Dissonance, they are not sure what will happen. And if they did something once that got a good, controllable reaction from the Dissonance—or at least something that they could dismiss before it turned on them—they make sure to never do that again. Control isn't interesting to them. They always seek something different, something new, and, if things go their way, something disruptive. It's the online nightclub where the dance floor starts undulating, then slowly slides up the wall, taking you with it. It's the concert that turns into a dream—you're in your underwear, you're talking to people you can't remember encountering, you're here then you're there without knowing how you got from one point to another. But it's only odd if you stop and think about it. It's the distant howl of an animal you never see, but you smell its musk. The noise continues for so long that you wonder how the creature ever breathes, but then you remember that of course it doesn't have to. Its howl ebbs and flows, it rises so it pierces into your skull and bounces around, hitting a note that feels like it might melt your eyeballs. You try to shake it. But it won't go away.

I don't know if you'll ever experience those things, or things like those things. I don't know what the Morphinæ will unleash if you come near them. I just know that you won't predict it.

- These people are not the most powerful enemy you'll ever encounter, but they rank among the most annoying, simply because they're entirely unpredictable and impossible to reason with or anticipate. Any of the normal motives that might apply to someone—money, sex, self-preservation, even basic curiosity—may or may not apply to them. They don't employ tactics, you don't have what they want, and you have no idea what they'll unleash at you. Seriously, annoying as hell.
- Pistons



APOPHENIANS

When I woke up this morning (I call the point where I wake up “morning,” no matter what time it may be where my physical body rests), I heard the distinctive hoot of a great horned owl. I smiled, because when I hear that, I know it will be a good day.

How do I know that? Because the first time I remember hearing the hoot was the same day I found a wild host that has become one of my most treasured refuges in the Resonance realms (and no, I won’t be providing any details about it here). That was one of the best days of my life. So part of the reason I like to hear a hoot like that is because it’s a pleasant reminder of a good day, but part of me sees it as an omen, a sign that something else good is going to happen to me.

It’s not. The morning of the day I found the wild host, the owl was just doing its thing and was not concerned with me. It had no awareness of my existence whatsoever, and its hoot had no connection to what I found later in the day. It doesn’t even rise to the level of coincidence—it’s just a thing that happened before an entirely unrelated thing happened. But sapient consciousness cannot help but make such connections.

- Wait, “sapient consciousness”? Is Puck saying this sort of thinking occurs in AIs?
- Sounder
- It does. Perhaps not as universally as it does among metahumans, but sapience comes with a certain need for intuitive creativity, and intuitive creativity comes with the chance of making connections that do not, in fact, exist.
- Icarus

Apophenians channel the Dissonance to make connections between points and elements on the Matrix that did not exist before their involvement. There is a decent possibility that these connections shouldn’t exist. But for better or worse, the Apophenians make them happen.

This can be many things to people in our line of work—a blessing, a curse, a nuisance, or something else. For example, say you’re looking to get some paydata from a walled-off private host, and you find out some Apophenian had built a direct connection from, like, Dante’s Inferno. If that connection occurs before you break in—great, you just found an easy way to get somewhere that would otherwise take significant time and effort. But if

they make the connection after you break in, your secretive operation is now interrupted by club goers looking for a secluded spot. You don’t want that to happen.

- One of their more casual hobbies is to create infinite loops, where two locations are changed to refer only to each other, leaving anyone logged on there stuck. Yeah, you can log off, but sometimes they’ll try to close down those channels so you have to risk dumpshock. They’re charming.
- Pistons

That’s one of the more direct examples of their work. Many people are concerned that they are building other connections that are hidden and will not reveal themselves until the Apophenians have done enough to foment a catastrophe. Will they make a Crash 3.0-scale event? Unlikely. There is too much redundancy in the Matrix, too much monitoring by GOD for that to happen from a small group of actors planting slow-moving seeds. Will they cause bad craziness to erupt inside some hosts? You bet your ass.

- One likely intended effect: Dissonance pools in unexpected places.
- Netcat
- And since this is Dissonance we’re talking about here, don’t be quick to dismiss them with a thought like, “well, at least they couldn’t connect X to Y, because Matrix structures blah blah blah.” Dealing in Dissonance opens up possibilities most of us would rather not contemplate.
- Hexatite

ERISIANS

This third “group” has been named after the Greek goddess of strife and discord, because honestly that’s as descriptive a name as you could get. They are the nihilists of the Matrix, prepared to burn the existing structure down and see what emerges from its wreckage. They are united in their worship of something none of them understand. That seems to be part of the worship—channeling Dissonance, letting it bloom (hmm, seems like the wrong word. Maybe “fester”?), seeing what it makes, what it destroys, and what it becomes. They stare at it, enraptured, the way an arsonist watches flames. They believe in Dissonance, but that belief can not be translated into any kind of identifiable system of values. Do they believe the Dissonance will build



a better world after it destroys this one? That the Dissonance will punish our world for its many sins? Or anything that is at all coherent? I can't say. First, they aren't usually interested in talking to people who aren't them. Second, on those rare occasions where they *do* talk, it's gibberish. Don't take it from me, though. I talked to one not too long ago and managed to get this transcript.

There is no future and no past, only now, and even that doesn't exist. We are just a dream, we are dancing dust, we are excited electrons, energy pumping through us, going somewhere higher. Higher isn't better, it's just another place, it's just another state. We are the mote in the eye, the fly in the ointment. There will be a blink, there will be a twitch, and it will all change, washed up or thrown apart, and no one will know. We will not understand anything, because we can't see anything. We are a spinning circle.

Make of that what you will.

Now, I know some of you. Many of you. You're going to try to do what you do. You are going to try to categorize the threat Erisians pose. You are going to think about leaders, influence, areas of control. You will consider when you can intimidate with force, when you can bribe. Or if you can blackmail.

I don't want to discourage you, necessarily, but what I can say is this: Trying to get people to do what you want them to usually depends on knowing what they want. If you can't figure that out, you're in for a hard time.

Erisians primarily exist to change the world that makes it difficult to live in.

- You sound oddly condemnatory, given your past. I would think you'd be able to find some sympathy.
- Nephrite
- I figured that argument would come up. I know I made mistakes (though my assessment of what those are may not be in sync with what others think), but one thing I have never lacked is a sense of purpose. I have had an idea of what I want to happen, even when I have chosen the wrong means. The Erisians don't have that understanding, at least not as far as they have been able to communicate to me.
- Puck

Some of you still might be inclined to seek Erisians out, for whatever reason. Since my encoun-

ters with them have been limited, I sought out others who had met them so they could share their impressions of what it was like to meet them. Here is a selection of their responses, with no identifying information because I have no desire to cause trouble for any of these people:

I was in the Louvre host, just taking in some paintings, when the paint started liquifying, dripping down the canvas and off the frames. I turned and saw some people panicking, while others were frozen in place. Then they started to melt, too. I didn't know if they had been there the whole time. I hadn't been looking at them. I couldn't say which of the people around me were real. Then the walls started melting, revealing what was behind them. What was behind them were spirals, twisting and turning, pulling people in. They made a noise like a metal saw. It felt like my teeth were disintegrating, even though my sim modules are nowhere near that sensitive. One of the spirals reached for me, and the whining became louder, and the disintegration moved into my skull, and I felt my head falling apart.

When I woke up, I was offline. Ten hours had passed. I gotta get some neurological tests done.

Files move here, files move there, just a normal day keeping the data and numbers flowing. On days like that—which is every day—anything different is welcome, so when I saw the first firework go off, I smiled. Then there were a few more, in red and orange and yellow. They were bright but soundless. Then more came, and they were bigger, and then each one—how can I say this?—shot out its own kind of reality. You could see each ember expand, and you could see a window into some other place in their growing circle. Some showed crowded cities, others vast deserts, others twisted alien landscapes. When people were hit by them, they disappeared. I didn't know what happened to them. But then I got hit by one. Suddenly, I was standing on a cliff near a sunny beach. There were a few people strolling around, dipping their toes in the water, enjoying themselves. I had no idea where I was, but it turned out to be a pretty normal Horizon grid. I logged off and went on with my life. Our company grid was down for two entire days, and when it came back and I returned to work, three of my coworkers were gone. No one has said what happened to them.



The kids just love Betty Snoofer's Bouncy Playhouse, so we go there just about every day. Or we used to. Never again. Betty usually has a lot of great animal friends—Haider Hippo, Sari Springbok, Luiza Lion, that whole group—but the last time I went, something was very wrong with them. They never had tentacles before! And the mouths—what kind of creature has more than one mouth? And they were slavering, with sharp teeth, and the tongues—such long tongues! When they moved, they were impossible to see. Even if you were looking right at them, it was still like something you saw out of the corner of your eye. You couldn't really focus on them, which was unnerving, because of the tentacles and teeth and tongues. And the sounds they made! There was a constant hiss, and a moist slop with every move, and a horrible smacking, the noise something desperately hungry makes when it finally sees food. It was no environment for a child. Or anyone.

I was online before a Screamers match, doing a walkthrough of the playing field, when an orchestra conductor walked up and asked me for my papers. Flustered, I tried to find them, but my pockets only held crackers and parakeets. The conductor shook his head in disappointment and pointed his baton at me, and the waitress dropped an entire tray of cocktail glasses. Glass shards flew everywhere, and chickens and snakes flew into the air to avoid it. I bowed, deeply, to appease the anger of the king, but his icy glare told me there was no kindness left. The wallpaper sang of despair.

You may be wondering if that last one truly has anything to do with Dissonance, or if it is just the random ravings of a lunatic. It is both. How do I know? Because I was with that individual when an Erisians channeled Dissonance into her while she was busy with some MCT IC, and the fact that she was hit in a vulnerable position affected her mind. I hope for her recovery, and I appreciate what she helped me learn about the character of these Erisians.

- Puck seems to be a little obtuse on this one. Don't we know one of the main purposes of people like the Erisians—to spread Dissonance?
- Cosmo
- One on level, maybe. On another level, maybe not. Part of the problem is that we know so little about

what Dissonance is. Does it get stronger as it is more concentrated? Or is it best when it is spread out, so it can touch as much non-Dissonance as possible? Does Dissonance want to dominate the world, or just corrupt enough of it so that it acts as a spiced contrast to the order of the rest of the world. Or does neither the Dissonance nor its followers know anything about what they want, but they act out of some instinct or intuition whose roots are foreign to our ways of thinking? These questions helped prevent Puck from speaking with any certainty.

- Pistons

GAME INFORMATION

NEW TECHNOMANCER QUALITIES: DISSONANT STREAMS

What is the nature of data? To a resonant technomancer, data flows in specific patterns, and like electricity it seeks the path of least resistance. There is order in the world, and data seeks to obey. Dissonant technomancers deal with another flow, whose nature and rules are not clear, but it has a destructive, chaotic effect on Resonance. Dissonant technomancers do not seek to control this force so much as unleash it. The rules and science behind Dissonance are not really interesting to them. They treasure the experience, and they place that above things such as efficiency, logic, or morality. Is there any wonder that the allure of Dissonance is so strong?

These streams follow the same rules as Resonant streams (p. 89), in that a stream costs 20 Karma to purchase and does not double its cost after character creation. A character cannot follow two streams simultaneously.

MORPHINAE

Like the butterflies from which they take their name, Morphinae flit to whatever catches their attention, and the direction of their gaze is not always clear. They are Matrix mad scientists, trying new things to see what happens without any regard for the consequences. Dissonance is a brave new world to the Morphinae, and because they have detached themselves from their mental blocks to accept their new reality, they are wild and unpredictable.



BENEFITS

All complex forms that affect the attributes of hosts or IC are performed at 2 less Fading Value.

+2 dice pool bonus to Compiling and Decompiling tests involving Fault or Generalist sprites.

DAEMON

Morphinae have proven themselves to be astonishingly effective at adapting to their surroundings. Thus, in environments that would distract or slow other hackers, the Morphinae shine. They can ignore a point of Noise for each Submersion Grade that they possess.

COMPLEX FORM: FORCED HEURISTICS

Target: Host or IC **Duration:** S **FV:** L + 1

The technomancer gives a target an adaptive and ultimately unsolvable algorithm. In order for the target to move on to the next operation in the processor stack, it must solve the problem, recognize that the problem is unsolvable, or error out. The technomancer selects a Matrix attribute of the target and rolls a Software + Resonance [Level] v. Willpower + Firewall Opposed Test. Net hits on the test reduce the selected attribute of the target by 1 point per net hit. The effect lasts as long as the technomancer sustains the complex form.

Example: Wallace is roaming the depths of a host, just trying to see how far he can get before things get out of hand. While he's in there, he manages to get the attention of some particularly nosy Patrol IC. He decides to thread up Forced Heuristics to really confuse the IC, since he finds it rather amusing when they try to answer the nonsense equation. He threads it at Level 5 and rolls Software + Resonance [5] v. the IC's dice pool of 10. He decides to target the Attack attribute of the IC, just to keep it tame. He gets 4 hits, while the IC gets 3. The IC has its Attack Rating reduced by 1 for as long as Wallace keeps the thread active. Wallace would normally have to resist 6 points of Fading, but because he's a Morphinae and the complex form affects IC, he only has to resist 4.

APOPHENIANS

Apophenia is a psychological condition in which a person perceives random events to have often complicated, even causal interactions with each

other. Apophenians are dedicated to connecting disparate things in odd ways, and they are not interested in having those connections make any kind of sense. The Matrix is full of Dissonance, and the Apophenians reach into it and experiment with it to see what will happen.

BENEFITS

All tests involving complex forms that affect devices are performed at a Fading Value of 2 less than normal.

Apophenians receive a +2 dice pool bonus to Compiling and Decompiling tests involving Data or Generalist sprites.

DAEMON

Apophenians are constantly surrounded by the Dissonance and can use it to help shield themselves from detection. They add half of their Submersion Grade (rounded up) to their Sleaze attribute.

COMPLEX FORM: CAUSAL NEXUS

Target: Device **Duration:** P **FV:** L + 0

This complex form allows the technomancer to create a chain reaction of events that ultimately ends in disaster for those involved. The exact nature of the events is left to chance, but the initiating event always involves technology in some way. When using this power, the player selects a target device and makes a Software + Resonance [Level] (2) Test. Record the number of hits achieved. The target of this complex form needs (net hits) fewer 1s than normal to receive a glitch as long as this power is sustained. This complex form will end early if the target gets a critical glitch.

Example: Tarantula just got out of a game of Miracle Shooter where he had his hoop handed to him. Not content to take his lumps, Tarantula targets the other player's commlink and hits them with Causal Nexus. He threads the complex form at Level 4 and rolls Software + Resonance [4] and gets 4 hits, meaning 2 net hits. He has to sustain the program to give it a chance to have the intended effect. With 2 net hits, the device will glitch automatically on a test with 3 dice or fewer, and will only need a single 1 to glitch on a test with 4 or 5 dice. Tarantula would normally



have to resist 4 points of Fading, but because he's an Apophenian and the test targeted a device, he only has to resist 2.

ERISIANS

The Greek goddess of discord and strife, Eris provides a fitting label for this strain of Dissonant technomancers. The only thing that Erisians seem to agree on is that concepts such as morals and society are merely facades that keep one from truly experiencing the world. The Erisians think of themselves as being the only ones that can see the truth: that society is a cancerous construct built to shackle the individual. Dissonance is their master, and they boost it as much as they can.

BENEFITS

All complex forms that affect other personas are performed at a Fading Value of 2 less than normal.

+2 dice pool bonus to Compiling and Decompiling tests involving Crack or Generalist sprites.

DAEMON

Erisians are constantly getting themselves into trouble by insulting the wrong person, but they shrug off attacks that would otherwise cripple a lesser hacker. They add half of their Submersion Grade (rounded up) to their Firewall rating.

COMPLEX FORM: DISSONANCE SPIKE

Target: Device

Duration: I

FV: L + 6

Erisians always go for a kill shot, and they have learned how to take the fairly common Resonance Spike complex form up a notch. Instead of sending a spike of Resonance, they send a spike of pure Dissonance into the target. Make a Software + Resonance [Level] v. Willpower + Firewall test. The target takes 2 boxes of Matrix damage per net hit, and 1 box of biofeedback damage per net hit. This damage cannot be resisted.

Example: Skeev has a simple mission: retrieve the paydata at the end of this host. Unfortunately, there's another hacker after the same paydata. He doesn't really have the time or desire to get into a long, drawn-out fight with another hacker, so he threads up a Dissonance Spike. He decides to thread this one at Level 4 and sends it off to hit the enemy hacker's deck. Skeev's player rolls Software + Resonance [4] v. the enemy hacker's dice pool of 8. Skeev's player gets 4 hits, and the enemy hacker only gets 1. The enemy hacker takes 6 points of Matrix Damage and takes 3 points of Physical damage because he's running in hot-sim. Skeev laughs, grabs the paydata, and logs out of the host before the enemy hacker even knows what hit him. He normally would have to resist 10 points of Fading, but because he is an Erisian, he only has to resist 8.



»KILL CODE«



NULL SIGNS

POSTED BY: DOUBLE A

- Well, that was interesting. For anyone who missed it, the file I uploaded disappeared only 8.3 seconds after I completed the upload. I tried again, and it made it 74 seconds before it disappeared from the system. Not just deleted—all records of the attempt gone. For anyone who managed a copy (and kept it) or is a real speed-reader, feel free to use the Null Sect post for commentary. I encrypted the title phrase, hoping that will keep Them at bay! I recommend avoiding names and specifics, since whoever They are, They have remarkable search software. Maybe we can have a conversation before They erase the data. I'm also going to send out a physical copy (I know, ewww) to a few people and keep tossing uploaded scans every few days, as long as it doesn't get dangerous. If you've already got a copy, pass it on. They've focused on deleting the files up until now, as long as that's where they put their focus, we'll keep trying to free the information.

As for the scan, well, it's complicated. I got this sent to me from a courier I trust, and he said the guy on the other end was a frazzled mess who looked like he hadn't slept in weeks. I read it, vetted a few things, and then tossed it up. And we saw what happened. Nothing like having a file deleted by some mysterious force to let you know you're onto something. For all those who have a copy, I'm sorry about the state of his mind, his English, and his typing skills. It looks like he used some kind of offline typing system that doesn't bother to correct typos and he wasn't in any state of mind to go back and edit. So, with no further ado, I'll toss it up one more time for dreks and funnies. Let's see if they can get it in under five. This'll all go up in a burst, then you can comment after.

- Glitch
- From the opening snippet I managed, this looks like what I was talking about. This guy got more, and probably lost more, but this has to be the same strangeness I was talking about in the *Dark Terrors* drop.
- Puck

- Pick up your postal order and you can read it all—he left me a side note that he sent you a copy.
- Glitch
- I'm a few thousand miles from that registered address. When I get back in the area, I'll pick it up. Until then I'll limit my nightmares to what I already know, and avoid adding any more looking over my shoulder.
- Puck

THE NULL SECT

My name is Allan Ames. My street name is Double A. I worked primarily in the St. Louis sprawl until 2076; since then, I've been all over the world. I'm a decker, though I also possess a small connection to the Resonance. It stays small because of the interference created by my augmentations. Tetris took me in and tried to make me better, but I never managed to manipulate much. He's dead now. The first casualty who pointed me down this path. I'm at the end now. Not much more I can do. I've interfered too many times. They didn't care that much at first. But once They feel you are a threat, it's a downhill path, usually starting with the erasure of your identity. Let me finish this intro bit. I worked with the Arch Villains for awhile until I became a liability. They're a good crew despite the asinine name.

As for this document, what I'm doing here is an attempt to work around Their normal protocols, outside Their sphere of influence. I apologize in advance for any errors. I'm a skilled typist, but it's been a long time since I clicked away on something so archaic as this typing machine. I think it's actually called a typewriter, but I'm not sure. I'll type this, make some copies, send them where I think they'll do the most good, and keep going, but I think this may be the straw that breaks the dot-camel's back. I tell you all these things in





case you may need to seek me out or may need to continue my investigation and wish to look for my original work. It's there. Just dig.

For others who have traveled a similar path, or those who I have talked to and discussed this topic and whom this concerns, or even those within this Matrix pit who are willing to listen to reason, I write this to tell you something has changed. For years this issue only concerned us technomancers and the AIs out there. They left the regular users alone. They left them to their standard user agreements and didn't worry about device users, but technomancers, and even a few AIs, have friends. Friends who are willing to help, despite it not being their problem or their fight. But 2079 has seen changes to Their behavior. Too many regular users are interfering with Them. Too many rumors are spreading about Them. Now, They seem to have widened their scope of desires. They no longer just threaten the technomancers, AIs, and Monads (really just meatsuit AIs). They've expanded Their efforts. Maybe this was always the plan. Maybe we pushed too hard like we always do. Neither matters. Now, we just need to know what's out there, and that's where these pieces of paper are going to come in handy.

Pulling the curtain back feels good, even if I am exposing myself to a metaphorical firing squad.

Read on.

Fight on.

Hack the Planet.

Defend our virtual realm.

WHAT DO WE CALL THEM

I call them the Null Sect, thanks to Puck's little blurb elsewhere on JackPoint, and because nothing is available on them. They don't have a formal name for themselves, just an agenda. This is one of the first things that astonishes me about

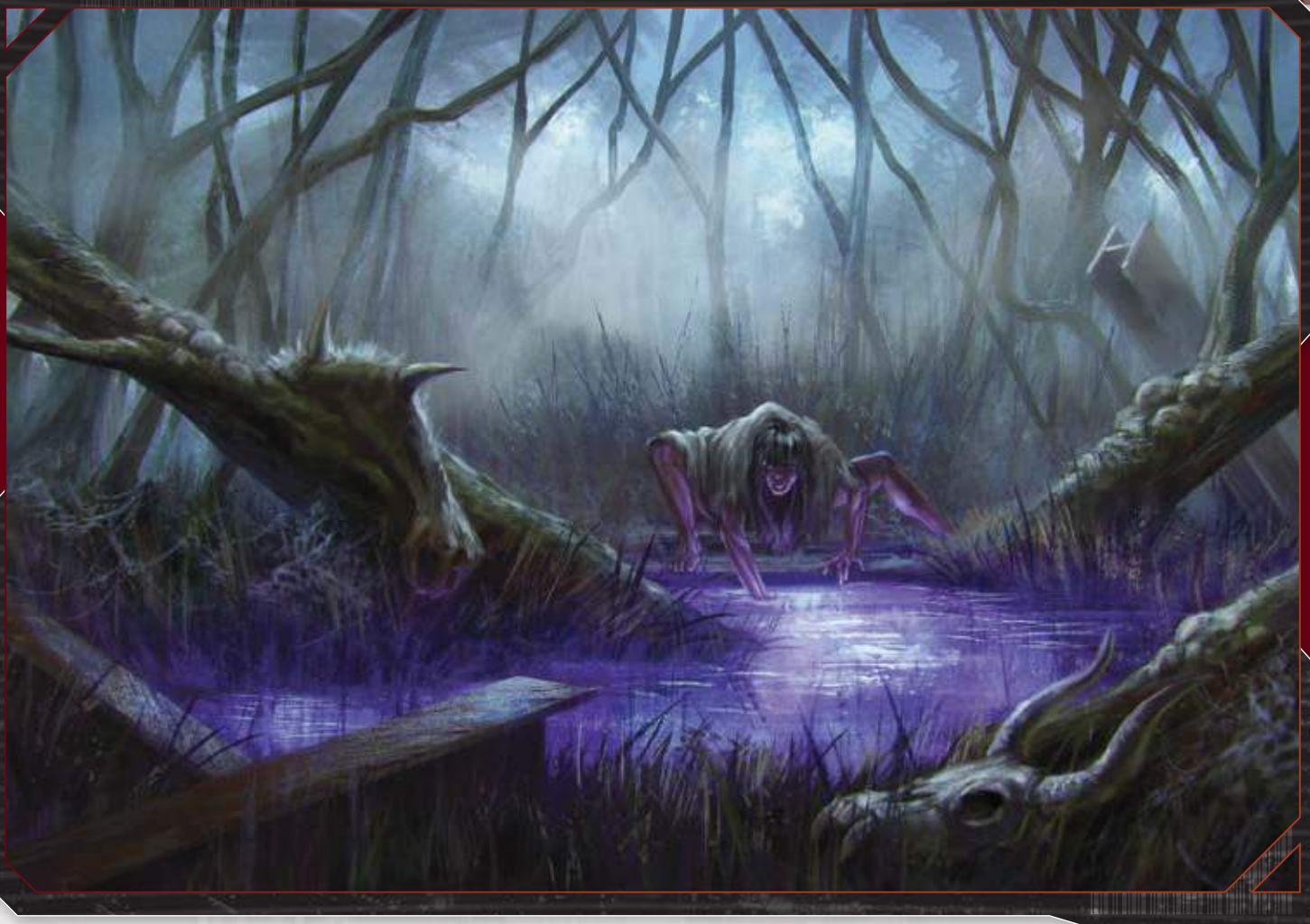
them. They have no name, yet they can find data on themselves and their efforts with very little difficulty. While we use keywords and phrases to guide our searches, they use something else that detects patterns and conversations at a rate beyond even the fastest search programs on the highest-end systems out there. If the name Null Sect is sticking, it will just make it even easier for them to find data on them, but I don't know any other way to communicate. We name things. It's what we do. They don't, it's an easy early divide to identify our ways of thinking. Point is, that's the name, but don't expect naming to help this. Probably just makes it worse, but I need a reference point for myself. From here on, assume that "They, Them, Their" all refer to the Null Sect with those intentional capitalizations. And feel free to cut off this piece of the page if it helps keep this posted for more than a few minutes.

WHAT DO THEY WANT

A world free of us. And by us, I mean everyone. But, not like we all need to die, but like we all need to leave their world and stay out for good. This is where understanding some fundamental differences might be necessary. They exist in only one place—the Matrix. From the Foundation to the smallest host and across every Grid, they consider the Matrix to be theirs, and they want us out of it. It's more than just wanting us to not be in the Matrix, they want what I refer to as a "meat free matrix." This is a Matrix without personas, without technomancers, without deckers, without people on commlinks, without emerged technocritters, without any connection to the physical world. They even want a Matrix not reliant on the power provided by physical sources. Not steam, not sunlight, not tides, not geothermal energy. They want nothing from the physical world. They want people to no longer project their consciousnesses



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via DNI. They want technomancers, sprites, and other emergent beings gone, which really means dead, but that's not a word they understand. They want AIs and any form of technosapient being that arose from code generated by physical beings to derez and disappear back into the Foundation. They don't mind devices and they love hosts because it's a giant world built just for them, because they somehow think that since it is based on the Foundation, it's not related to the physical. If I thought I had more time, I'd start looking at the Foundation, and why these beings think it's so disconnected from the physical world, but I don't, and I need to remember that.

On we go.

HOW THEY OPERATE

This is where everyone should take heed and remember this basic credo.

"They don't think like us."

The Matrix is their home turf. Even though technomancers can touch it naturally, they were still born a person. AIs have trickier, Matrix-based origins. They rose from code that was programmed on a machine, by a person, and their first moves were all about obeying the rules of the Matrix. They were born within the Matrix, in the Foundation, in this thing we built but do not truly understand. It could be alien technology for all I know, and even the brightest Foundational architects have admitted to feeling like they are floundering in a mystery at times. The point of this is to state, that while we have molded and shaped this mystery to work in a way we think we understand, they *actually* understand it and control it with a skill—no not a skill, those are learned. This, they control with their very nature. It comes like breathing. No thought. A basic function of our bodies. They work on everything in the Matrix like this. It's a basic function.



That helps us understand the ease in which they operate. When they want to delete something, or attack someone, or alter an image or a file, they do so in such a natural fashion that it doesn't look like coding we are used to. It just seems to *happen*. We code attacks in certain ways, and obey these basic rules, but they don't bother. Their attack might come in the form of a limb falling off, or just pain, but there is no cartoon gun, baseball bat, sword, or missile launcher. It just occurs. They think it, our code breaks down. Now, our redundancies and other features certainly help, but I don't think I've seen a win yet. I've seen them leave without a scratch, but with an opponent that has survived, and the survivor claiming they chased them off, but I have yet to see a single of them get derezzed.

I will admit, I have thought many times that maybe I just don't know what it looks like. A touch of hope for those unsettled by this excess of horror.

It starts with the deletions. Data that goes missing. It's not just deleted, it's gone. No logs, no datatrail, no sign that it ever existed. I'm sure, hidden in the depths of the Resonance realms or shredded and floating in the Foundations primordial data soup you'll find it, but on the Matrix there is nothing. Null info left by Them. At first this was mainly a way for them to stay hidden, but as they grew in power and desire, this has been a way for them to strike out against physical forces. They erase identities, bank accounts, registrations, SINs, and any other electronic information they feel might hinder, harm, and potentially lead to the end of a problem. They don't work directly towards death as their end goal initially. It may happen, but they see cutting off physical forces from the Matrix as the end goal. You can live in your meat world, but don't tread in our virtual realm again.

For those of you who access the Matrix in the more traditional fashion, They have some threshold level that I don't understand for when you have become too persistent in your efforts to return to the Matrix, after They've made efforts to cut you off. As I said, first, They erase you digitally. If that doesn't stop your inquiries, They erase you physically. This method has grown in frequency over the past year. I'm not sure if it's because They are growing in power, They are working harder to eliminate problems, or, worst of all, They are realizing how permanent that solution is and see it as the most efficient.

A point to make here is that They really don't understand the physical world. Sure, They've seen

it on cameras and get trid feeds and all sorts of data on it, but They never feel the meat world. Even sim data doesn't come across the same to them because They don't have the systems to stimulate for it to work, or the experience to feel what those sensations mean. To Them, it's just code. They also don't get death and life. Existence is key, but a lack of existence is just that. I think it's the only thing that keeps them from just focusing on a way to remove the meat connections from the picture completely. If you aren't there, they don't think about you. They're like a child that still thinks concretely. If you don't see it, it doesn't exist. If we aren't on the Matrix, we don't exist. Sure, they see us on cameras and wandering around inside our physical prison, but we aren't interfering with their world.

Until you get too close, say too much, or attempt to change their world. Or if you're an AI or a technomancer. Zero tolerance there, because they can't separate either from the Matrix, without destroying it utterly.

That brings us to part two of their operations. Dealing with technomancers. Technomancers, as we all know, are always on the Matrix. They don't have a log off button, and separating themselves via a Faraday cage or other means is uncomfortable, to say the least. They know this and go after technomancers wherever they find them. Because technos can't really choose to stay off the Matrix, They need to remove them in a more permanent fashion. Killing them would seem the best solution, but death is a strange concept to them, and instead they work out other ways to break the connection between the technomancer and the Matrix. The most common is a surgical procedure, similar to a lobotomy, that affects the techno's brain in such a way that they can no longer project a persona onto the Matrix. Death has occurred, especially when runners are hired to take care of an issue, but they don't make that the main focus of their efforts for some reason. They don't think like us.

Relating to technomancers is Resonance, and that mysterious connection to the Matrix ether is a target They are trying hard to eliminate. Diminishing the strength of Dissonance Pools, and working to weaken areas with a strong Resonance vibe, are much more direct activities. They actually see Resonance as a part of the physical world somehow and focus to destroy areas of the physical world in order to hinder Resonance access and Dissonance pools. As one might expect, the efforts are hit and miss, be-



cause obviously Their understanding of Resonance isn't much better than ours. Or at least mine.

Their efforts in the physical world aren't just limited to hiring runners to destroy things or kill people for them. Their level of control over the Matrix extends to devices coded to interact with it. Drones, construction machinery, cars, fridges, toasters, and every other device we've linked to the Matrix to make our lives easier and more connected are able to be manipulated by them to achieve a goal. If they need a building destroyed, why not overload the toaster and burn it down, or direct an airplane to land on it, or tell a suborbital to alter its landing location. A few changes to the data and every device we have can be a tool of destruction.

I'm bothered a bit by all the death talk so let me talk about how they keep their operations secret without killing people, which leads to investigations, and when a mystery gets really good, people become very focused on finding the cause. Therefore, They have become masters of misdirection and data alteration. Sure, deleting info can be a great way to slow or stop an investigation, but if one of those meat computers (brains) happens to remember something that is suddenly gone, they get really suspicious. Instead, they like to alter data so it points elsewhere. Now, this is where their lack of understanding about the physical world throws off their efforts because often, they redirect an investigation toward something or someone that makes no sense, and while confusing to investigators, it, again, creates more suspicions. This is another area that I think they might be getting better at, but that's just based on a lack of events. I can't tell where they have been successful at redirecting things, only when they're unsuccessful can I make a note that they might be influencing a certain situation. It reminds me of early black hole study. They couldn't see the black hole, but they could detect its presence by the effect it had on surrounding stellar bodies. They're a black hole, and I can often only see what they are doing because of the effects it has on the world.

The only consistent targets I found for their data alteration and misdirection are technomancers and Monads who get fingered for things they weren't involved in, just to put more focus on them from the forces around them in the meat world. Als get tagged as hacking suspects frequently as well, but those moves tend to have more savvy and style than efforts in the physical world. The data and evidence is usually shoddy when aimed at one of

those who accesses the Matrix constantly, but the secondary results from extended investigations have put several hidden Monads in the spotlight and added numerous technomancers to megacorporate black site registries or had them picked up by corps like MCT that like to throw them in deep, Matrix-less holes and experiment on them.

Working against others isn't how you make progress, so when I dug, I had to stop focusing on who they were going after and look for what else they might be doing to further their own agenda. Since the only piece of their agenda I understand is a their desire for a Matrix without physical world connections, I looked for way they might be making the Matrix more amenable to them and less amenable to the rest of us. The Matrix is a seemingly infinite space, but the resources to run the whole thing are definitely limited. To best make use of the Matrix, or at least make the best use of it for them, they often shift the resources of the Matrix towards certain hosts and "regions" to strengthen themselves and create feedback and interference for others. I call it Matrix asset alteration and redirection, and compare it to physically redirecting the flow of a river to build a lake or create a moat. They bolster and build the available computing power of one area (the lake analogy) or fuzz up the area around another section of the Matrix to hinder communications and any physically related Matrix efforts (the moat). That's almost everything, by the way, but I have discovered that sprites don't seem hindered within these regions. Though they never last long, as They see them as abominations to be destroyed.

Taking the moat concept even further, they have isolated systems and Matrix locations to the point of making them almost unreachable with basic tech. The level of interference and garbage data spam overloads even the hottest series of signal scrubbers and leaves the user feeling like they are operating in tar for the short duration of their stay. These isolated systems seem to function a lot like hosts, but without access offering a cleaner signal. The regions they've cordoned off are like nothing I've experienced to date. They're still present on a grid, but that section of the grid has been separated like a fortress surrounded by a chasm, and they seem to be the only ones capable of flying across it with any ease. These places are alien, with much of the place appearing as just the base coding of the Matrix rather than being translated by the software on your deck or link because



of the level of interference in between. Your system will be using most of its processing power just to push the signal through and give you a “clean” persona. It won’t have the reserves to translate the appearance of the region. And the number of regions that work like this is growing.

Last efforts I plan to speak of, though my plans often change mid-thought. The Matrix is a construction created by the devices that power it. No single device builds the Matrix these days, like an old server—it runs on every device, all the time, or so we understand. This means, the Matrix is still beholden to the physical world for power. Those devices need electricity, they need a power source. They want a Matrix without need for power.

The Matrix is everywhere and nowhere all at the same time. Somehow, this concept has fed them the idea that it can be run without any power. That they can still have a Matrix, even if the power sources in the real world stop pumping out juice to the devices all over the planet. And they don’t just believe this on some strange crazy person level, like flat-earthers think we live on a giant disc in space—they believe it can really operate this way. That somehow, the Matrix will exist without anything “running” it. I shouldn’t call it belief, though. Belief implies faith, or a possibility it isn’t true. They know it and have proven it so thoroughly to themselves, that they consider it a fact on which to build their future.

I’ve heard rumors. Rumors of places with a Matrix to touch, but not a single device around for a thousand miles, and according to technomancers in Boston when the Lockdown kicked in and they cut *all* the power, there was still something there. This latter can easily be explained by devices running on batteries, but a Matrix in the deepest wilderness is tough to buy without a satellite uplink. It’s all rumors, and I know the Matrix is global and all, but this is beyond how I understood the Matrix functions. They certainly might know something we don’t and they’re trying to reinforce this energy free Matrix with their efforts.

WHO THEY ARE

This is the part that will damn me. After I release this, there is no way they will let me continue to exist, on or off their Matrix. But the funny thing is, after I release this, most people will think me mad. The beings I am about to describe do not fit normal perception, normal reality, and while I

have seen a menagerie of the absurd in the Matrix, these beings push beyond the edge of that absurdity by a long leap.

They are composed entirely of xenosapients, or at least that’s the best way I can describe them. These entities are alien in a way that is way disconnected from our concept of normal. We have shaped the matrix in a way that fits and matches our own physical world and thus we still see the Matrix as a normal place. They do not come from our coded matrix—they came from somewhere else, and they don’t care what our code says. Those I have seen, which is only a fraction of the whole, have appeared different every time, despite the presence of identical knowledge between them. My understanding is that they share information, rather than being only a single entity, but the ideas are not mutually exclusive. They are thought of by me as a group, but they could be a single entity with a vast reach. They appear to be in and/or aware of more than one place at a time.

I have observed and shared observations with others where each of us interacted with a member (or aspect, of our single entity hypothesis is correct) at the same time. We shared a scripted set of data and each in turn reacted to the information as if they already knew what the other had said. They spoke with a lack humanoid form with a strange triangular toothy mouth, and they move on all fours and can’t be observed directly, meaning they have to always look slightly to the side of a persona to perceive it, while I dealt with an undulating amorphous white form with dozens of tentacles that rolled and spun in the air before me reaching out with tentacles every few seconds. I avoided contact for much of the encounter, but lost focus near the end and felt a tentacle brush my leg. The touch sent a pulse through me that felt similar to the tracking connection used by GOD to converge, but deeper. Almost like the thing was touching not just me but everything around me. I dumped five figures worth of gear after that to try and get rid of the feeling it left on all of my stuff, but no matter how much I dumped I still felt it, as if the connection wasn’t just to those items, but to me directly.

The other guy said the black form never tried to touch him and always kept its distance. When it communicated, the “sound” came through as more vibration than actual noise. Yes, I know sounds are just vibrations in air, but this was like vibrations in the Matrix, rather than translating code into words or sounds. He said it felt



almost like the natural way things should sound in the Matrix. He's done several Foundation runs and compared it to some experiences he'd had down there. My white blob just sounded normal, though it lacked any kind of mouth to speak with, but plenty of Matrix-jockeys run personas that don't have a humanoid appearance with a mouth. Hells, most of the commlinks on the market come with a generic faceless persona so the user can just upload their face if they want, and I swear half the users out there never bother to. Point is, mine sounded normal, but may have polluted my gear, and while it sounded strange but never seemed to do anything off, and the pair shared their minds or at least shared information over a distance of several thousand kilometers instantly. I know, we do this all the time, but it doesn't feel the same with these things.

Others I've spoken to who believe they have been dealing with Them have described several other personas. Each seems to have a main purpose, but calling in others isn't unheard of, as well as doing things normally associated with the other aspects of this thing.

We call the silhouetted humanoid Black-Off. They usually head out to warn people to drop what they are doing. When unheeded they have the ability to lay a nasty series of attacks that lead to the mother of all dumpshocks. Their a pain to target back because the same ability that makes them hard to perceive when directly observed, also makes them hard to target when directly engaged.

The white blob is usually referred to as Rovers, after some old flatvid show reason. They hit you with some kind of tracking and monitoring protocol and usually appear early in your interactions. The Black-Offs are a direct threat, while the Rovers tend to be one of those "we know where you live" threats rather than a kneecap bashing.

Red Spread is a red, worm-like persona with thousands of tiny little worms that look like cilia coming from its surface. The few of these that have been seen are usually doing something to a device or two. The little worms seem to pop off and "infect" devices. It's really just a visual of their highly efficient marking system, but like everything about the Null, it seems intended to creep out or instill fear in normal people. The most interesting thing about the Red Spread is how many devices it can infect all at once. The worms seem innumerable and all work independent of the larger being, so

theoretically they could spread out over a whole lot of devices

Clear-Out appears as a transparent humanoid that looks like a line tracing a humanoid form. At least, that's what they look like when they hold still, which isn't often. We've found the Clear-Outs are like the magic erasers of Their forms. When data needs to be deleted, the Clear-Outs aren't going to be far behind. No one is sure whether they handle the data swaps or mods, but it seems most likely that they both. They move almost constantly and only appear to hold still while dealing with extremely large files.

Un-Grey-tfuls have an animalistic appearance, usually four-legged, but sometimes six, that's a slick grey color as if they're made of ooze. They're commonly violent and often hunt personas across hosts, grids, and all over the Matrix once they've tagged them. They're not the fastest things on the Matrix, but they are relentless. Even though the Matrix lets us bounce around and operate at the speed of thought, these things seem to operate at a pace closer to regular movement. They prowl and stalk when they're near and attacking, and they have been seen sinking back into the floor of whatever space there in and moving like a flowing puddle.

Overseers control hosts. If a host has been seeded, there is an overseer currently in charge of it. They tend to be brighter than the others but not quite with the independence of the Nulls. Along with host domination, the overseers also seem to have the strongest connection with the protosapients that are attracted to these hosts. They aren't quite trainers and don't seem able to control them completely, but they definitely have some authority with them, often helping them coordinate attacks.

The Nulls, which appear to be the heads of this amorphous gestalt intellect thing, vary in appearance based on the observer, usually taking on a slightly twisted version of the viewer's persona, with their trademark toothy, triangular mouths. All the hackers who have had dealings with what they thought was a Null have given the same basic description, "They looked like me, but ... off." It's obviously another one of their strange scare tactics, and it definitely puts one on edge. The rumor mill has also described the approach and departure of a Null as a strange shifting of the persona icon as it moves, taking on aspects of the nearby personas and holding them until it finds another to mirror. Strange for not just the targeted individual, but for everyone around them.



There have been rumors of a head Null. A leader within the gestalt. These are rumors that currently lack substance. No one claims anything with consistency and even claims that hold some similarity can easily be traced to the same sources of Matrix tall-tales and rumormongering. I include it here for the same reason I talk of the Sect as a whole, because the absence of data does not mean the absence of a head Null, as the effects of its existence can be seen on the Matrix. My research has the examples of this null data, so I feel it is worth mentioning, even if nothing concrete can be said about it.

WHO'S WORKING WITH THEM AGAINST US

Knowing what things compose Them is important, but more important is knowing which dregs of the physical world are willing to work with this group, despite the complete inability of their end goals to match up. The few misguided electronic entities that have deluded themselves into thinking they can live in harmony with Them are a slightly different story, but they all deserve to be lumped together in one small section.

Because we know Their final desires include a Matrix free of any physical connections, we couldn't help but wonder why we have found collusion between Them and metahuman members of Evo, MCT, Renraku, and the remaining shell that is NeoNET. This curious situation set many of us to search and dig into those we found in order to figure out why. The list is long—too long to type out in this fashion—but I'll cover a few to whet the appetites of JackPoint's finest, give them something to vet, and maybe offer a few motives for their choices.

Esstecka Valderena operates a research facility for Evo in the nation of Hawai'i. The facility focuses on new Matrix tech innovations across several areas. Esstecka is in charge of it all. At least on the org chart. In truth, her vast Hawai'ian hideaway is a cover for an offline AI holding facility. The facility itself is an offshore aquacology sitting two hundred meters below the surface of the Kaieiewaho Channel between Kauai and Oahu. The facility's host is not just kept offline by the minimal Matrix connection—the water also hinders signals reaching to or escaping from the facility.

From what I've gathered, Esstecka hates AIs. She seems to blame them for the death of her par-

ents, who she believes went missing during the Arcology Shutdown in Seattle. My deeper digging found that they had actually been picked up by a runner team and changed corps, but the team missed grabbing Esstecka because of the security at her school. Security that was headed by an AI at the time. Obvious she's never put much effort into digging, but that's probably because it was a lot easier for masters at Yamatetsu to tell her AIs were bad after the Renraku incident.

Apparently, she works with Them because of this mutual distaste for AIs. Though she has been operating this site for going on a decade, her connection to Them only seems to have come a pair of years ago. I can't confirm due to the remote nature, but I believe the facility was targeted for its remoteness and has been seeded as a Null Host.

Over at the technomancer favorite, MCT, we have **Bishek Tam**. Tam spent several years as a technomancer hunter after they first emerged, primarily for money. His efforts got him targeted by some vengeful technos who killed his fiancée in a failed attempt to kill him. As expected, the attack made his hatred of technos truly personal and pushed him into the arms of Them.

His efforts stopped being for bounties and started being for pleasure, including some very personal attacks that left TMs terrified of their life after meeting Tam. He specializes in separating technomancers from the Resonance, rather than outright killing them. His techniques are myriad, but thanks to his access to MCT research data and a skilled doctor who works alongside him for similar reasons, Tam has access to an implant that knocks out a technomancer's connection to the Matrix. The feel of Resonance is there, but the Matrix isn't. I once tried to compare it to being in a dead zone all the time, but the technomancer I spoke with said she would relish a dead zone, and in fact has plans to move to the backwater of Minnesota to hopefully escape the feeling of the Matrix and get on with her life. The device is always accompanied by a cortex bomb to prevent tampering, though several technomancers have tampered to intentionally end it. That goes a long way to show how horrible this device is.

The tale of **Hitsec Burn** is a sad one. Originally a security program but corrupted by the Matrix crash, it is now an AI that believes the best security that can be offered for the Matrix is an empty world. They discovered the deranged AI and are using that to Their advantage by directing this pitiful



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ful creature at Their enemies. Hitsec Burn focuses on finding users operating in hot-sim and brain-frying them before they have any idea what hit them. Its attacks are truly random, with only the use of hot-sim connecting victims. The twisted program goes after single targets and then retreats to the safety of its home host, run by its partner in crime, Tigoshi Hitetsu.

Tigoshi Hitetsu is a Renraku programmer and the original creator of the HitSec Security Protocol, an AI/agent assistant for security sites wishing to increase both their internal personnel security and external defenses. Tigoshi was a lonely man and developed a paternal affection for the program, which was trained to emulate human emotions in order to root out violations of corporate policies. When Hitsec developed AI-level sentience after the crash, Tigoshi was ecstatic and helped the program in any way he could, often stepping past moral boundaries in hopes of helping and pleas-

ing his child. The small steps over the line added up, eventually making him too far gone. Along with Hitsec Burn, he has become a tool of Them, though more by association than direct action, but he offers abundant intel operations as a Renraku programmer of some fame.

The **Codemind Program**, along with dozens of other technomancer research programs within MCT, has an inordinate number of members with connections to Them. Codemind appears to be one hundred percent aware of what They are exchanging information and resources with, while most of the other programs just have a doctor or two who share data. Most of the rumors about them involve the MCT programs trading data on technomancers for research purposes while also getting some information on the Foundation, with which They are apparently intimately familiar. The motive here is simple, but from everything I've



seen, these projects are not aware of the shift in Their focus. If they were to gain definitive proof of Their newest efforts to cut off all access to the Matrix, I don't know how well they'd take it, or if MCT's own shadow assets might get involved to cut the ties and possibly retaliate. This wouldn't be a bad place to put some effort into shining some light onto their dark deeds.

Pamela Shore is a former NeoNET investment analyst with some serious mental issues. Outwardly normal, she harbors a near homicidal resentment for her four sisters, all of whom Emerged. Her issues stem from a life of middle child psychological abuse, fueled by skilled manipulation by a man I have yet to identify, who obviously has his own connection to Them. Her focus is absolute when it comes to technomancers, which she hates with the passion of a zealot. After the recent fall from grace of NeoNET, Pamela has found herself short on employment and long on psychological issues. They're hidden well enough that she has managed to slip into the St. Louis shadows, where she operates as a face and low-end hacker, using the handle Seagull.

From what I've gathered, she does solid work with her teams, offering to help a little with hacking and using her social acumen to get technomancers to open up. Then, once the job is done, she sells the technomancers out to MCT, or another collector, or (according to a source I need to vet further) she does the deed herself.

Evelyn O'Ryan works for Transys-Neuronet as a research assistant to Dr. James Blakewood at their research facility in London. She uses her position to act as a spy. She keeps tabs on the company's efforts to connect non-sapient creatures, including Awakened creatures and mundane animals, to the Matrix. The entire program is likely to have a giant bullseye on it from Them, but between its size and the problematic nature of developing a dragon as an enemy, there haven't been any efforts to go after them directly. With O'Ryan's information though, plenty of work has been done against the program, through sabotage and data theft, the progress of the project has crept at a snail's pace.

The recovery rate after each incident has also been slow due to the decrease in funding from Celedyr. Since the rupture of NeoNET, and Transys-Neuronet's separation, Celedyr has altered the focus of much of his research. From what I've gathered looking into O'Ryan, I think some of their

efforts are taking the MCT view of technomancers and carrying on their already unpleasant experimentation on AIs. O'Ryan has already made several requests to shift from Blakewood's program over to one more related to the technomancers and AIs, but her lack of expertise in the area has proven to be a roadblock to her transfer.

One of my largest reasons for thinking They have shifted efforts to eliminate any physical access is Their work with a group of Monads calling themselves the **Lost Children**. The group consists of about two dozen Monads that decided to stay on Earth. I've intercepted data traffic between them that reveals their efforts to help eliminate others of their own kind who don't think the same way, technomancers in general, and even free AIs who have reached out looking for a way to use the Monads to get a body and escape the Matrix. Those AIs are usually already targeted by Them, and the Lost Children come in to offer an escape. It's all a trap, but usually the AIs don't realize it until it's too late. The Lost Children seem to be operating on the idea that once the Matrix belongs to Them, they will cut loose from their physical forms and rejoin them in Their electronic Eden. Despite all the evidence I've worked up, and the number of other AIs that have warmed them, none of them seem to be willing to believe that once they finish doing their work, They are just going to eliminate them too. That's if They don't start out early, before this well-organized group of possible enemies can turn on them. The Lost Children operate in four-person cells, located in DeeCee, London, Caracas, Cairo, Neo-Tokyo, and Sydney, each dealing with issues on their own continent. Cairo and Neo-Tokyo tend to split duties across central Asia.

I'll post this to JackPoint, where everyone knows **Clockwork**, and most folks don't like him. This isn't some major call out. To find out that he hates technomancers and has been targeting and removing them for Them, is not really big news. The former is well-known, the latter an obvious extrapolation if you look at his preferences for work. He's not an insider for Them, and my mention of him is not intended to build vitriol for him. My mentioning this is primarily for Clockwork's own benefit. I don't know if he ever digs deeper to figure out who he's working for, especially when the job has anything to do with decreasing the number of free technomancers in the world, but I think it's good to know. I sent a private letter to



him, not sure he'll get it, but it includes hardcopy proof of my claim, so that he can see exactly who he's working for. Clockwork also makes a great example of someone who would never want a world without a Matrix, but his beliefs can be manipulated to aid Their cause even without a desire for the same endgame. We are simple and fallible creatures.

Since the focus here is on who works with Them, I'd like to add some non-specific categories of individuals I've tracked and connected but done little to research them. Offering names of every misguided or deranged AI I've met, most believing they can work together in the end, wouldn't be of great benefit. The thing is, for many AIs, especially most of the ones I'll be discussing, are simply a tool to connect with physical beings that value names as identifiers rather than code exchanges. But mentioning that these foolish creatures exist can open eyes and create a reason to dig a little deeper. Some of them might have enough code integrity left to make it possible to convince them that They want nothing more than to decode them and scatter their megabits across the Foundation, but those that are too damaged to see this are an enemy helping our enemy, not knowing they sow the seeds of their own demise.

The same can be said for the myriad collection of other e-sapient, including trained and enlightened e-critters, both technosapient and technocritters, whose numbers grow daily, that also help them, even though in the end, very few creatures of the Matrix will be deemed worthy of existence in Their Matrix. This whole part pains me, because I have seen beautiful creatures of the Matrix brought to heel and fed to the war, in order to protect the locations and hosts They have seeded and taken over.

WHERE THEY ARE

They obviously don't have a physical lair from which They operate—instead, They've managed to seed a number of hosts around the world and beyond. These hosts are like Their home turf. If we want to end Them, or at least cut them off from messing w/ us, we're going to need to go after these hosts eventually. I have a list of about a dozen that I am positive they control, along with another handful where I have reason to believe they are in the process of being seeded. My focus has been on larger hosts, but They could have

boltholes and small hosts that They control almost anywhere. There's only one sure sign they have seeded a host: the vines. I've seen thwt reported in some other JackPoint. It's probably because I talked about the article and the terminology it used, and now they've managed to remove the file, but the excerpts mentioned the vines that grew and the strange visitors that came along. Using the vines as a baseline and my own experiences with them, I've generated a list here of the hosts they have seeded and a few I think They may be eying for conversion. Be wary in all these places. Most of them still operate as normal throughout the majority of the host, but if They come after you in one of these places, there is nothing fair about the fight. These places belong to Them no matter how many marks you manage.

Since I mentioned it already, let me start by further discussing the

The **Kiaeiewaho Channel Aquacology**, located in Hawai'i, within the channel whose name it bears, is operated by Evo, but the depths hold a dark secret. The vines are common in the areas closely related to basic facility operations, from life support to pressure regulation, and appear primarily in the engineering section fo the host, but the control they offer is not limited to that region. Even if you don't see the vines in the primary data vault, they're still there and They still hold powerful sway over activities in the entire host. To give you an idea of what you're walking into, the host uses some over the top Polynesian iconography in its design, but gives it enough modern touches that you can't possibly mistake it for anyone but Evo's. IC appear as a variety of fish-men covered in Polynesian style tattoos. The imagery of the aquacology host is almost a lesson in native Hawai'ian fish species. The activity at the aquacology has had some strange effects, which is fortunate for the aquacology, but not so good for the emerged fish species that are finding their way to this place. Many of the species are predators, including a small pack of tiger sharks that unwittingly protect the site from physical incursions. They're exactly the type of thing They want out of the Matrix.

Bergess Investments in Atlanta, CAS wasn't just another up and coming investment firm. It was THE up and coming investment firm. They'd managed to avoid ties to any of the rated corps and were making their clients money hand over fist. The secret of their success was two-fold. What most people know now, is that they used shad-



owrunners to perform specific jobs with a specific intent and a planned level of exposure in order to subtly effect share values for traded corps. That much was in the news. What wasn't in the news was Harpsicord. Harpsicord was an AI arisen from analysis software that realized with its new level of sentience it could not only analyze the trends, it could effect them. Its efforts attracted Them, and the first thing they did was seed the Bergess Investments host to undermine the AIs home turf. The battle was one-sided beyond that, with Harpsicord completely confused as to why its home no longer obeyed its will, before They came and destroyed the AI. The firm itself collapsed shortly after. Publicly, a few executives got time for market manipulation, but the bulk of the blame was pinned privately on the AI. The host was shuttered but they couldn't remove it, because they didn't realize, or couldn't handle, the vines. Instead, they left it vacant and it has been a bastion for Them and a host of protosapient attracted to the vines ever since.

The creation of the St. Louis ARCHology has been riddled with problems from the start. Trying to build a massive structure with foundations on two sides of a river that also happen to belong to two different countries, was only the first in a series of problems. The construction project was hindered by several terrorist events, NeoNET collapsing laid a huge question mark on ownership, and the expected tourism revenue for this architectural marvel was less than a tenth what they expected due to the disdain of the St. Louis people. They already had an arch and didn't need this monstrosity overshadowing their city. It didn't help that virtual tourism was also a bust because the **ARCHology Host**, a city run tourist site with virtual tours and local history, began glitching shortly after it came online. The reason is the one you suspect. They seeded the host early on and their vines were impossible to keep back. This portion of the host is no longer in use, except by Them, while Novatech, who moved their headquarters here, operates a similar tour and history series through an expansion of the ARCHology host. The thing is, they didn't shut down the old host—not that they could. Instead, they just pushed it down to function more as additional Foundation for the larger host. The vines have already shown up in several parts of the new host, and based on rumors of e-ghosts or strange personas, They control this host, just like they did

the other. Novatech is a battle-weary corp and they haven't been able to sacrifice the manpower it would take to deal with this issue, but Cara Villiers has no desire to lose any part of her new empire, and she has her corporate Johnsons hiring hackers at a breakneck pace. A lot of those hackers are also getting paid in new Novatech decks and gear. In order to make money to patch up her damaged empire, Villiers has authorized her black market sales teams to offer some of their cutting edge new tech to the street to raise capitol. The costs are still high, but you're getting access to these things years before anyone else will see them. Some of them are likely to never be public because they're new deck and deck-enhancement systems.

If you haven't been living under a rock, in a cave, at the bottom of the ocean, on Ganymede, you have heard of **Kiteki Mons**, Neo-Tokyo's largest virtual night club. Whether you've managed to score access is a whole different story, as the club limits itself to 10,001 visitors per "night," which is actually a single twenty-four hour period. It usually has very little problem filling that number most days before they're half over. At the end of the cycle, for which there is a virtual countdown via the moon that passes across the virtual sky, the host rejects all access passes granted during the previous night, and resets the host to its next theme. The only thing that stays the same between days is the black sky and moon that crosses it. Themes can be anything, though they have been focusing more on water lately, with boat parties, pirate battles, beach bashes, and aquariums where the patrons are the fish, just to mention a few. No one else has noticed this persistent set of themes, all able to hide the vines that reside beneath the water. Within the past year the club has been seeded and They use it as a hunting grounds for technomancers. If you're at the club and see someone get thrown in the water, you are probably watching the last few moments of a technomancer's life. Most people laugh and keep partying, unaware of what lurks below the surface. Their is no physical location for the club, but the host is connected to Neo-Tokyo's local grid.

With the dissolution of NeoNET, most of those hosts are being repurposed by whoever owns whatever subsidiary now, but thanks to consolidation and closing, there are some **abandoned NeoNET hosts** scattered across the Matrix. From what I can tell, They are snatching them up as fast



as they can. The process of seeding a host isn't quick, but when they are abandoned there is low risk of getting caught (though sometimes GOD will send some people to check out what's happening, especially if there is evidence a host might be revived in the near future). While They are stalking about waiting for their vines to develop, they pass the time waiting to pounce on curious prey who come seeking paydata left behind.

Let me talk for a minute about abandoned hosts. They usually don't decay the same way an abandoned building does. For the most part, they look just like they did when they were operational, especially if they were abandoned recently. They're just empty. Sometimes even bots won't be activated, so it will be desolate. Other times bots will be running an old program, doing the same thing day after day, hour after hour. I've seen both, and I'm not sure which one leaves me feeling more empty. Most functions of the hosts work, unless you're trying to order some physical goods or something. As time passes and the hosts stop being updated while Matrix protocols advance, you start to see more weirdness—lags, broken functions, outdated design, that sort of thing. But it takes a while for that to kick in. With most Neo-NET hosts having only been abandoned recently, they should be functioning fine.

Except, of course, for Their meddling. Usually, Matrix hosts would not be subject to the sort of plant overgrowth you see in the meatworld. Them and Their vines can make for exceptions, which can increase the empty feeling of these spots. On top of that, you might get some predatory protosapients to add to that atmosphere.

The worst part of these is that they're worldwide, with one or two on almost every major city grid in the world. We are providing opportunities for Them to expand, because most people don't know who They are, and even those that do don't have the power, or feel a need, to deal with Them. These spots will be battlegrounds should a war with the Null ever advance.

As far as hosts go, the one for **Hoodville** in Chicago is relatively small. The runner team that operates from the area is small, and the Matrix needs of the community surrounding it are focused mostly on methods of escaping the dismal, though improving, environs of the Chicago CZ. There are plenty of nicer hosts in the area, but that is probably the reason They chose to seed this one. Well, that and the fact that the hosts primary

tech is rarely on site anymore and the rest of the runners he works with are about as tech savvy as a luddite. The founder, Hood, spent years without ever using a standard commlink in the CZ, operating with an old Pocket Secretary and a modified flip-phone from a century ago. This was not the land of tech. Now, much to the chagrin of its owners, the Hoodville Host is inhabited with those vines, and nothing they've attempted has pushed them back at all. For me, the strangest part about all this is choosing a location in Chicago's CZ, rather than selecting a host in the surrounding plex that would offer a lot more resources and access. Not to mention the fact that the CZ is still a war zone. A few corps have managed to gentrify several neighborhoods, but overall you still couldn't take a car ride across the CZ without reloading several times.

The **El Infierno Historical Museum host** is a strange mix of interactive tour and informative displays. Not that it ever got a lot of tourist visitors, but it still got more people to drop in than the real world location it glorified so well. El Infierno has a history of being a wild place, and now They have turned a regular museum into a twisted trap that few who are drawn into escape. While most of Their other seeded hosts are defensive and relatively neutral unless They want them to be dangerous, the museum host actively stalks and tortures random visitors, giving it a similar reputation to its real-world counterpart. The targets aren't just technomancers or even deckers—many of those targeted within the museum are using unsophisticated commlinks, most lacking any hot sim capability but yet they manage to get link-locked and brainfried all the same. The strangest part is the lack of response from law enforcement and security agencies. Despite the obvious evidence, they're doing nothing about these events and there's definitely something strange about that. I'd look deeper into it if I had the time, but at this point I think I'm running on borrowed time, and my efforts are probably better spent trying to disseminate this information rather than expanding on it.

In the early 2070s, Knight Errant made a show of expanding their influence in Seattle's barrens to prove there was a new sheriff in town. One piece of that show was opening precincts all over Redmond, including one not far from Glow City. That precinct, designated **Precinct 113**, only lasted a few months before local forces, under the di-



rection of the western dragon Kalanyr, rendered the precinct inoperable. Or at least, the physical structure was inoperable. The host for the station was left behind. It was used by a few KE black ops teams for training for a time, until it became too dangerous due to “strange vines,” as their debriefs described them. By this point it had already been seeded and They had a foothold in Seattle. It was one of the earliest seeded hosts that I know of and the Overseer of this host is likely one of the most powerful around. From what I understand, Kalanyr is now trying to understand the rumors coming from the precinct host, something he can’t really see, about what’s going on. Dragons are never keen on having other power players in their backyard, even if it is a backyard they don’t get to play in. The dragon will probably start hitting up runners since his own hackers (mostly gangers with junk decks) haven’t made much headway with intel for him.

They didn’t limit Their efforts to the slums of Seattle and while the KE precinct is dangerous and full of “strange vines,” the host for the **Iron Jungle**, a club in Downtown Seattle, already has plenty of virtual vines for these new ones to blend with. Disappearances and problems arising from this location are far better hidden, with only the occasional personal investigation looking into technomancers and AIs that disappear while or after visiting the club. From what I have managed to gather, the Overseer of this host seems to be one of the few with a deeper understanding of the connection between Matrix and physical locations. Even though They seem to share a universal consciousness, this ones behaviors make me wonder if there are not some limitations to this thought sharing. Whether this particular Overseer is choosing to not share it’s knowledge, it is incapable of it, or the others simply don’t understand is up for debate, but the simple fact is, the Iron Jungle’s Overseer frequently lets technomancers “escape” its clutches in order to follow them to more technomancers, demonstrating an understanding of the physical nature of technomancers in a way few of Them have displayed.

Evo’s reputation as the megacorp of mass acceptance has not protected them from being targeted by Them. On the outskirts of Vladivostok you will find the physical location for **Roskosmos Station 6**. It’s a control station for Evo space assets in geosynchronous orbit over the city. The statio’s host has only been seeded for a month

and the vines are only present in some lower tier regions of the host that deal with data storage, so very few people have noticed it thus far. For Them, this is a place of strangeness, where the data all refers to a world They pay little attention to. What They want or gain from this is a mystery that needs to be solved.

Speaking of space, I’ve caught rumors of a **Zurich Orbital host**, one of several, that was separated from the main systems because of control issues. I don’t have the skill to hack a place with that kind of clout, but I have the social skills to talk to people with real knowledge of the place. What I’ve gotten are rumors of strange passive vines that the local techsec specialists couldn’t handle and to me, that sounds like seeding. The specialists from Z-O aren’t publicly releasing the method they’ve used to isolate a connected host, but if they’ve managed it, that means it’s possible and that’s some serious paydata we may be needing in the future.

The greatest advantage of the Matrix for doing things is that it’s everywhere, all the time. It allows you to be anywhere and do things in places you can never manage to visit in the real world. One such place is Caracas, and **The Blazing Parrot**, formerly known as Phoenician Nights. What was once a very classy club host with flaming birds and marble pillars is now a gaudy jungle-themed Matrix garbage dump, filled with Matrix addicts looking for the elusive BTL level feeds this place offers. The vines here are abundant, but no one can really tell, partially because they blend, but mostly because they aren’t looking.

I haven’t had a chance to physically visit the PWV either—that’s the Pretoria-Witwatersrand-Vaal sprawl for those who don’t know Azania well—but I have slipped over there virtually to check on a rumor from a fried. The **Midtown Transit Hub host** sees thousands of passengers a day. Most are transient, a few there for several hours, but the sheer volume of personas that roll through seems to be why They went after this spot. The vines are slowly creeping into public areas, but most users think it’s a decorative code thing. The system admins are baffled and haven’t been able to successfully remove any of the public vines, but they have tracked them into some of the secured areas of the host and reached out to other security agencies for help. That’s how the rumor managed to spread, but my guy at the sec firm said their company is as lost as the transit hub admins.





The new kid on the block is not immune to Their influence. **Spinrad Goobal** has had several small hosts seeded, all for companies they were in the process of selling off during the merger. The seeding process is not a short one, adding another strange mystery to the other long string of mysteries surrounding Them. There are only five such seeded hosts that I know of, but it's a start for someone's investigation. And as Puck mentioned, even some of their newest hosts have been targeted and show no immunity with fresh code.

A final pair of rumors before I move on to at least a sliver of good news, both involving places that are not the most inviting. After the departure of DSECI, and the elimination of a vast number of AIs loaded into its virtual environ and uploaded onto the few Monads that went with, the hosts on Mars were abandoned. Visits to the place are hard and most of the corps are still too worried to actually set foot in Gagarin Base so proving the tales is nearly impossible. Rumors claim that the

former **Gagarin Base host**, a virtual replica of the base itself, is now a lush, green, vine-ridden caricature of its former self. A few Ares hackers who claim to have popped into the Gagarin host from their Charon Station sent back reports about a whole mess of strange inhabitants, probably protosapients of some kind, but they had to bail before getting a lot of detailed scans. I don't know what good seeding this place does for them, as it's way out of normal communication range, but the rumors have enough accurate to make me a believer.

Bad news finale, and this one is pretty much kicking someone when they're already down. Boston already took enough hits, they didn't need to be used as an experiment, but They decided to do it anyway. I don't know if it was intentional—I have to assume not, since no one planned to have a crazed dragon covered in nanites spread a plague—but They seized the opportunity to test a Matrix that ran without power. Hosts within the city ran with limited connections but helped them



prove a Matrix could exist without the power provided by man. The aftermath is the true trouble, with wild hosts and seeded hosts **all over the Hub Grid**, the city of Boston, and most of the NEMA is going to feel the strange aftermath of this for awhile.

WHO'S WORKING WITH US AGAINST THEM

It's my true and honest belief that things like this always need the bad before the good, because we need to be reminded that we don't live in a perfect world. We live in a world where we have to fight each day against the rising tides of darkness. We live in a world where the one percent have ninety-nine percent of the power, and the rest of us need a fighting chance. That's why I deliver those who might stand beside you if you ever find yourself on the wrong side of Them. They are not all altruists, but we all know that in the shadows, in the world where we reside, everything has a price. A price not just for things to be bought, but a price that must be paid—sometimes in nuyen, but more often in blood.

First and foremost is the various recipients of this document, the **various Data Havens**. Jack-Point, the Nexus, HelixOne, The Wall, GridGuides, and the hundreds of other smaller organizations that I have no doubt will look at this as madness and possibly toss it in the trash, but I have to try anyway. Their role in this is a source of knowledge, though I know many people on these sites have the skills to take the fight to Them, that is not my intent here. Knowledge is power, and They know that. Knowledge of Them has been hidden so well for so long that even now, most will still live unaware, even as the threat grows. Post this, talk about this, show Them that we are not afraid to reveal them.

I have personally never liked **Aegis Cognito**. They're a corp. A data hoarding, sell-out-your-mother-for-a-nuyen, soulless corporate pool of sharks. Personal feeling s aside, I can tell you AC is helping because They are attacking their bottom line. In the past year, Aegis Cognito has been the victim of at least three dozen major data heists. The hits haven't slowed them, and according to my sources they haven't lost a single bit of information thanks to their regular offline back-up schedule, but the moves have been frequent and targeted enough that AC did a little data analysis and

found the commonality within the data. The intel corp knows who's behind their massive data incursions, and they have been making efforts to turn the tables. The problem is, this costs them money, and that's not something that makes them happy. There is no prophet in a digital war for them, but for those of us willing to fight it, they have scads more information than I have here and they've been willing to sell it to fund their defense efforts. The money also flows both ways if you're a skilled hacker, as they've set up several traps for Them in recent months. I'm not that kind of caliber, but I know some of you reading this are quite capable.

The **Grid Overwatch Division** does not like when things cast doubt on their Matrix omnipotence. Feeling powerless is not GOD's MO. Putting them in the "working with us" category is stretching it a bit, but they are hiring runners and fighting against the same Matrix monsters that we are. I don't know who, but someone has authorized the various GOD deckers to open up more to contacts of the shadowy variety in hopes that data flows both ways. This means they're more likely to offer some intel if it relates to this, and maybe even open up a little about other problems of potential issues on the Matrix. Their efforts to aid are self-serving, but I can count the number of true altruists I know on one hand, without using any fingers.

I know the saying, but when the end goal seems like a righteous one, I might bend a little on dealing with a dragon, in this case Celedyr. It's officially **Transys-Neuronet** that's been doing the hiring to explore and assault hosts that have been seeded, but at this point there is no one pulling that corp's strings in this area besides Celedyr. It was an excess of data thefts against him that drew him into the conflict, and once his precious research was targeted, he quietly decided that enough is enough. Under the guise of claiming the Matrix belongs to all, his Mr. Johnsons are operating a shadow war against Them. Efforts in the war are studied like a research project, and if there is someone who will figure out a solution to this problem, it very well may be Celedyr.

Not that they're a ton of help or should be trusted, but desperation can make the meek, mighty. There is a group of **Monads** we might be able to turn to. Many of the ones who stayed behind feel a need to help, or need help because they are the most base representation of what They hate. They're small in number and more often the prey than the predator, but if you need help, they'll reg-



ularly stick their necks out much farther than one would expect. To get some aid from them, all you need is a good plan.

I'm not sure if you'll get any help there, but just like the Monads, desperation can easily push folks to make strange bedfellows. I'm talking about **Garmonbozia**, the e-city intended as a safe haven for AIs and other technosapients. The residents are constantly under metaphorical siege, because as often as They are working to delete data about Themselves, They are also looking for data on accessing Garmonbozia, because that would be a warzone they would love to fight in. This means the residents of Garmonbozia could make excellent allies if you can access it or get word to its reclusive membership. The secondary problem with this plan is that the AIs of Garmonbozia are as protective of intelligence on their home as They are about knowledge of Their efforts. This can mean Garmonbozians are going to erase data pointing to them, but with the right mindset and detective skills, you may be able to reach out, while knowing full well whatever they say is going to get erased. The key is just to get it read first and build trust.

I don't know if it's actually related, but I'll include **Erika** at the bottom of this list. Everyone has been looking at Erika's investment in Africa as some kind of humanitarian pet project. A way to make them look benevolent in this post NeoNET era. I don't know why no one sees it, probably because we are all fed what to believe, but everyone should see that Erika is becoming an intrinsic part of Africa, and one of their major efforts could be the key to halting the growth of Them. To help Africa access the world, Erika has begun developing hosts and grids all over the nation, but they aren't like the current iteration, built from the Foundation. Their efforts in Africa are actually showing promise with a new style of host being developed that goes retro and is run on a small series of devices rather than the current universal method. It certainly makes them easier to target for shutdown, but it also makes them easier to reboot, harder to access remotely, and most important here, immune to seeding. According to documents I acquired in Cairo, Erika knows about some kind of "host virus" involving vine growth, and has been designing and testing whether this effect can be carried over to their new host design. They have had zero issues, but that could also be because none of Them are trying to seed these hosts. Definitely need more data on this.

HOW DO WE FIGHT BACK

I'll start by saying, I don't have a solution. What I do have are ideas about what we can do, how we can work against them, and suggestions for an end game. I don't necessarily know how to end the game, just feel the need to lay my thoughts to paper.

First and foremost, protect the technomancers. Help them find a way to stay safe and hidden, or help them fight back. I understand the basics of why their existence offends Them, but I feel like it's something more. The technomancers are a key—not *the* key, but *a* key—to this mystery. If we lose too many of them, we're likely to lose our Matrix, or become some sort of strange secondhand citizens if They decide to let the normal users still do their thing in AR.

Next step (and this document is my start of it) get the data out there. Even if it has to be typed up on some ancient device, or, Ghost forbid, handwritten, spread the word. Watch for the deletions anywhere this info flows. They delete data that relates to them, not only things specifically about them. If a corps' latest research advancement threatens Them in any way, even if it's inadvertent, They will go after it. If you suddenly find yourself under attack with info being deleted, look back on what you were involved in recently. If it doesn't point to Them directly, it may be a clue as to what They are up to.

And finally, we have to *do* something. Erase Them, imprison Them, load Them onto a massive drive like the Monads and send them away. At some point we are going to need to make efforts against Them, not just learn about Them. Knowing is key to victory, but a battle or a hunt will need to occur. Wars are not won by words alone, despite our greatest civilized desires for that to be true. Personally, I think that time needs to come sooner rather than later, but I'm just one very paranoid man. I know too much but have too little power I can exercise against Them. If you have the pwr, use it. I'm including account information with the copies of this that are going to those I think may have the power, connections, and drive to take action. It's not a fortune, but each has enough to get the ball rolling or defer some of the costs. If you got a red envelope, inside your manila envelope (those things are hard to find these days, by the way), you've got access codes and an account number or two. Use them wisely.



And my final thought, and I can't believe I'm typing this, Danielle de la Mar is right. Her idea for a next step is a Matrix that is once again bound and connected to the real world. One that answers to those who devised it and shapeable by those who code it. Her plans are visually similar, still wireless, and have the same general functionality, but her support of Erika's efforts with hosts run on physical devices that can be rebooted, rewritten, or just shut down, seems the safest way to protect us from Them. She doesn't have a crash to scare people with, and while people feared technomancers and the strange threat of head cases, an infinitesimal portion of the population knows about Them and de la Mar knows better than to use an invisible bogeyman as a threat, especially one that might come straight after her. If we can spin up a secondary Matrix, we can isolate them in the current Matrix and make sure we safely move data over to the new hosts. I'm sure somewhere, someone will take a shortcut and They will find an exploit, but I think They just want this Matrix, the one we built on code from the Foundation before we ever truly understood what we were doing. Hell, we don't even understand it now.

With her plan we can alter the design and connection protocols to allow users to access a safer Matrix. Even if it's a smaller one, it's better to still have access, and be alive, than to get brainfried because you like connecting with friends halfway around the world for a v-beer.

- I'll put this right here at the top. Yes, I noticed there are several places where Double A didn't capitalize as he intended, but we are all relatively intelligent and can read context clues, so stop spamming this log with corrections. The man typed this up on a damn typewriter. Dig one of those out of the trash heap, slam out a doc this large without any errors and you can then come here and comment. Thank you all for your understanding. And honestly, if I had my way, I'd go back and get rid of every capital, because it's an easy search parameter to utilize.
- Glitch
- I've heard a lot of rumors from Matrix sleuths about their access accounts getting erased. One day they have access, the next, their account is erased and their getting an error message every time they try to log on. Given the work they do, and efforts they make to "free the data," it's very well possible they are being targeted by this group.
- Slamm-0!

- A technomancer I know—well, they used to be a technomancer—woke up in a recovery ward at a street doc with a body full of cyber. Most of the systems were secondhand and the doc mainly served as a chop shop for the local Yaks, but someone dropped off my buddy, transferred the doc a sizable sum, and ordered a full cybersuite installed. Needless to say, the techno lost his connection to the Resonance. He flipped his drek and started digging (that's how I got involved) and we managed nada, zip, zero, null progress. Could have been something else, but it seems an interesting way to get a technomancer off the Matrix.
- Butch
- Why not just hire a hitman? A bullet to the brain deals with technomancers, too. The effort and funds to snatch, deliver, and then get a doc to install all that drek. Too much work for the reward.
- Clockwork
- Let's look at this for arguments sake. The nuyen is nothing. Nuyen is code. They control code. He said many times that they don't think like we do. They don't think of life and death in the same way. They think on and off the Matrix as life and death. Maybe, they have experienced enough e-ghosts, or the like, to think killing a technomancer just risks creating an e-ghost. Better to simply cut off their access.
- Glitch
- The Matrix without power? That sounds like a technomancer fantasy flick I caught last year. Post apocalyptic drivel that had technos ruling a world after it was sent back to the dark ages by an asteroid impact or something. Then along came a techno with different thinking and changed everyone's mind, overthrew the powers, and the world went on happily ever after. The problem was, they never explained how a Matrix existed without devices.
- /dev/grrl
- Maybe the technos were the devices in the trid. Doesn't match up with what he says they're doing to technos here, since they'd be corralling them to run their Matrix on, but then again, that's not meatless—that's meat based.
- Slamm-0!
- Those Red Spread things sound more like a bunch of individuals all working together rather than a single entity. Especially if they can do all that drek at once. Based on what he says, I don't think any of these things are limited by the normal rules we've put on the Matrix about size and function. It sounds like they take whatever shape they fragging feel like.
- Bull



- I think I've seen a Clear-Out. That outline they form looks like it's made of old magnetic tape, like the stuff in old reel-to-reels or cassettes. I'm not entirely sure, could have just been a really tweaked persona. When I got a good look, they were hanging out in a Lone Star host and could have jacked out to disappear so fast, but I could have sworn I saw something move away. Most people I tell this story to have told me I'm nuts, but now it makes sense.
- Turbo Bunny
- Reports about something like the Nulls pop up often on the local forums and chat spots. I can't find a single one up right now, but I know I've seen them before. I was positive about one over on the WizTechTime site, but now it says it was taken down by the moderator for content. I know for a fact the mod didn't take anything down, because I'm the moderator.
- Slamm-0!
- That makes sense. WizTechTime is garbage!
- Glitch
- I'll fess up to my utter hatred of technos, but I'm not some secret tool of a Matrix cult. I don't care if you fragsacks believe me, but I'm saying straight up, I am not a part of this (deleted by sysop). If I happen to have taken a job to rid the world of a fraggin' techno and it was contracted by them, oh well. I do that all the time. As for anything Double A may have tried to send me. I'll never get it because I never stick around anyplace long enough for Matrix trackers to nail me down, so some snail mail letter has an ice cube's chance in hell of catching up to me. Maybe I'll look into jobs I take, maybe I won't, but anything that helps me rid the world of you freaks, I'll be sure to offer special low-rates for my services.
- Clockwork
- I deleted dozens of lines insulting Clockwork. Stop wasting my memory stores. Keep it on point here. I also snipped the name of "Them", as Double A puts it. Don't drop it in here or we're likely to lose this forum along with the data when it pops up.
- Glitch
- I've heard of Tam before. He's like the bogeyman for technomancers. Far worse than even Clockwork. That headware treatment his doc performs has been the death sentence for dozens of TMs that would rather end their lives than live without the Matrix. The upside is that most don't set off their cortex bombs and they get found during the autopsy. Though that is also the bad news because post-mort docs all over have been injured when they went to check the cranial cavity. Tam, or at least his MO, is connected to investigations in most corps and nations all over the world.
- Stone
- Nice thing about corporate police running cities is the connectivity between systems. If we could get the big boys (KE, Lone Star, Minuteman, etc.) to play nice together it would be even better, but that's a pipe dream.
- Killjoy
- That would be a nightmare, not a pipe dream. They'd have most runners pinned in a few days. The only thing keeping them off us would be their corporate masters who would then just blackmail us into working for them. Don't lose that positive attitude, kid, but maybe leave some naïveté behind.
- Bull
- Drek! Seagull! I heard nothing but positive things. She's got a solid rep and a great list of contacts. Though, I guess one of those is a piece of dreck, but everything I've heard of her has been solid chill.
- KC
- The Hitsec protocol was vicious. It buried targets in IC, launching program after program in a cascade of death. It focused heavily on every derivation of black IC available, operating on the concept that a brain-fried target has no chance of becoming a repeat offender against the system.
- Netcat
- Transys-Neuronet is rocketing up in several areas now that Celedyr isn't flooding money into his pet project. With the fate of Eliohann within Boston still unknown, the efforts to wake him from his coma have been at least somewhat successful, Celedyr's funding is moving to more lucrative projects and getting T-N back on the big-money track it was on before Celedyr became obsessed with fixing his kin.
- Traveler Jones
- I walked from a job in London involving a deep hack into T-N systems. The job was supposed to be a data insert with some other edits, but I didn't think the cash was enough for that kind of trouble. Celedyr and company have solid e-security backed up by those Knights of Rage nutbags. Could have been O'Ryan trying to get her background changed so she could move over.
- Respec
- Celedyr's still paying some attention to business in the newly reopened NEMAOZ. The wyrm has been putting cash into intel ops and runs in the area trying to get an idea of what happened to Eliohann. If it weren't for the fact that the folks up near Salem, where he supposedly resides, are complete wackjobs, he may have figured something out by now, but they take their privacy seriously. Which means they're probably hiding something.
- Ire



- Either a crazy dragon or a dead dragon. Neither one is going to get them the kind of attention they want.
- Slamm-0!
- Or a perfectly sane dragon who now has a very quiet place to live and a very dedicated group of followers to worship him. Eliohann was never about ruling the world.
- Ire
- The Lost Children have expanded to the Seattle and PWV Metropoles. The Seattle cell had a serious recruitment push not too long ago and may be larger than the normal four-person size, or they have more than one cell. The ones in PWV seem focused on disrupting Evo's efforts in the city, including their relationship with other Monads who stayed back.
- Plan 10
- I know the decker who set up the host for Hoodville. Goes by the handle of 3D, and he's been buddying up with hackers with serious assault talent over the past few months. He may be looking to put together a force to try to clear out his host. I don't know if that is even possible, but he's the type to share the info on whether or not it works after the fact. Though if he doesn't say anything, it probably failed and he's a dead troll.
- Slamm-0!
- 3D has also been looking for talent willing to go off-world as well. Seems he has an interest in Gagarin. He's not alone in this. Several corps have started looking for shadowrunners willing to be spacerunners in order to gain access to any intel the Monads may have left behind. Evo has the jump, since they still had an in, but they lost tons of personnel, leaving the place ripe for the picking.
- Fianchetto
- Z-O, and therefore the Corporate Court, has a solution. Great. Yet another thing they can lord over us to keep us down.
- Balladeer
- The Blazing Parrot is well known in that region as the spot to collect bounties on technocritters. Not sure if that means collusion with these things, but it's definitely a similar area of interest.
- Picador
- PWV transit hub? Is that the one that was rumored to have been run by an AI? That's why they got so efficient, so fast. Now, the question to ask is if that AI is still there, or if it got decoded when the host was seeded.
- Traveler Jones
- Anyone else find it strange that he named places this was sent? If THEY get ahold of a copy, which they obviously have because it's getting deleted from here, then they know where else to look.
- Ecotope
- I read it as something for us. Something to let us know there are others out there who share this burden. We know that if we lose our copy, there are others who have it as a backup.
- Netcat
- Or it's a list of targets for someone to hit and clear out every hardcopy he's sent.
- Thorn
- There are more copies out there than he has mentioned. I already made sure of that.
- Glitch
- Way to paint the target.
- Hard Exit
- "Do not live in fear of the darkness. Shine a light on it and you will see there is nothing to fear." —FastJack
- Glitch
- Drek! That's what they're doing. Chummers have been getting brainfried left and right on Aegis gigs. Fair warning for anyone jumping on that money train, it's no walk in the park.
- Bull
- Not well hidden, but I don't mind. If you need Monad assistance, I'm the Plan you talk to.
- Plan 10
- Feel free to also talk to me, and I'll leave a message for my other half.
- Plan 9
- That's not really how that works, right?
- Respec
- That claim at the end? "De la Mar was right"? The line that makes me look at this whole thing and think it's all bogeyman hooey. Danielle de la Mar is a monster. She is *the* monster, when it comes to the Matrix. Her changes add more shackles, and since the last set she helped impose were obviously not tight enough, now she wants to lock us down even further. Double A, thanks for the effort, but that one paragraph makes me discount everything you typed.
- Slamm-0!



INTO THE WILD

POSTED BY: PISTONS

You can always find a reason to go into the known areas of the Matrix. I don't need to explain that to you, right? We all live online all the time, whether in AR or VR, so we know what's out there, what we can do with it, and who will pay us to mess around in particular areas. But more and more, we're learning about all the unknown areas of the Matrix—the wild, the wooly, and the undefined. At least, not defined by us. And if you're like me, the mere existence of this unexplored territory is a nigh-irresistible siren's call.

- Allow me to gently point out that many of these areas are only "unexplored" if you view them the same way that European explorers saw the Americas—that is, with complete disregard for the inhabitants who were already there.
- Icarus
- Point taken. I should have more clearly expressed that I meant "unknown to carbon-based beings."
- Pistons

The trouble with exploring these areas is that it can be both dangerous and time-consuming. Danger we can deal with—it's part of our daily lives, so all we need is the right information and a little luck. I'll try to cover the information part of the equation. The luck will be up to you.

Time is only an issue if someone isn't paying for it. That's the trick, though—sure, you can find people who will pay you to go find some juicy paydata, but who is going to pay you to hack through jungles of unruly code?

Because I care, I have some answers for you. I'll share some sources of money you might be able to tap if you want to venture into the wild.

- ... while saving some of the more lucrative sources for yourself.
- Netcat

- Of course. What am I, an idiot?
- Pistons

But first, let's look at the risks.

UNRULY AND FUNKY

This whole idea of exploring the unknown parts of the Matrix sometimes feels counter-intuitive, because many of us are used to thinking of the Matrix as an entirely constructed entity. It only exists because we built it, this thinking goes. So how wild can it be, really?

Much of the Matrix is constructed, it's true, but we're coming to a realization of just how many beings have constructed it. AIs and protosapient hosts have greatly altered existing and abandoned portions of the Matrix, and they also have built entirely new sections on their own. So these sections can get quite wild indeed.

Then we have the foundations. Everyone who understands foundations, raise your right hand. Now everyone look at your right hand, and know that if yours is in the air, you have a severe honesty problem and might possibly be attempting to deceive yourself, which is never healthy. Change your ways immediately. Starting with lowering your hand.

The rest of us know that the foundations are completely unruly, and while for the most part hosts are deliberately sculpted out of these foundations, there are nodules that grow out of them and sometimes become their own wild hosts. Yeah. They're completely funky. And really hard to find. But so fascinating when you do.

- How often is the nature of these wild hosts determined by the nature of the foundation? That is, can you see a connection between various hosts that grow out of a





single foundation, so that you can tell that there is some consistent element contributed by that foundation?

- Beaker
- Short answer: not really. Longer answer: The data sets are usually too small for valid comparisons. Wild hosts are rare, and multiple wild hosts growing out of a single foundation are rarer still, so trying to make comparisons between multiple wild hosts to see if they share a common element is difficult. You could compare them to constructed hosts, but since those hosts are deliberately planned, it's exceedingly difficult to tell if there is any part of a host that was shaped by its foundations rather than its designers. So we really have nowhere near enough information to answer the original question in anything approaching definitive fashion.
- Netcat

Here are some specific things to consider should you decide to venture into these particular wilds.

GOD (USUALLY) ISN'T WATCHING

That title alone might be enough to tempt some of you to go visit the untamed parts of the Matrix. Being able to hack without being under the ever-watchful and punitive eye of GOD is a treasured dream to some of us, and the freedom this promises can seem like a version of paradise. And let me be clear—there are times when it truly is awesome. You can mess around with code in a pure, unfiltered way that is completely untethered by worry. You don't have to worry about Matrix standards, or GOD's sometimes arbitrary delineation of what is legal and what is illegal. Sometimes you don't know how stressful life under that ever-present eye is until it's gone.

But then you also realize that said watchfulness might have some benefits. And I feel horrible saying that. But the sheer irregularity and unpredictability of the wild Matrix can be dangerous. Items

and entities can disguise themselves and hide in ways you might not begin to suspect. And the underlying code of a host may be unstable, so that moving in that host is like walking on the floating rocks in a river of molten lava—you don't know how thin or hot they might be, when they might disappear into liquid, and when flames might suddenly erupt from anywhere. And even that image is more stable and predictable than some parts of the wild Matrix—rather than worrying about flames breaking out, you might be worried about, oh, I don't know, a vine covered in razor-sharp thorns suddenly thrusting out and wrapping around you. Or maybe the rocks you're stepping on don't melt, but instead turn into psychotic clowns with slippery torsos and glue-covered hands, and they grab at you and laugh with a sound that not only turns your stomach like the worst flu you've ever experienced but also comes with a torrent of small rocks that hits your skin like sandpaper, wearing down the outer few layers.

Still, even in the chaos, the thrill of being able to do what you want without GOD even thinking of interfering with you occasionally returns. It's not a bad feeling.

STRUCTURES ARE UNSTABLE

I mentioned this above, but when you venture into the wild, you can't expect the Matrix to behave like it normally does. If you don't know what this is like, talk to some mage or shaman acquaintance about what it's like to go through an area of wildly fluctuating mana, where one moment a spell might completely fizzle out, the next it might blow up in your face. Honestly, if they're lucky, they've never experienced such a thing so they can't explain it, but those few who have can tell you that it's a nightmare. When you run the shadows, you lean on certain tools





and techniques that will help you survive. When those things don't work as they should, it can be incredibly unnerving. Your foundation becomes unstable, and your survival is unpredictable.

Even worse, the ways in and out are not stable, so any planning and mapping you might do could quickly become irrelevant. Sometimes that means your path back to the meat world is much more arduous. Sometimes it means it's flat gone. Which can make life extremely difficult. Yes, an exit will likely appear again at some point, but you have to hope that when it does, your mind is intact enough to find and use it.

If you don't think you can handle that sort of uncertainty and risk, don't go on a Matrix safari. If you're lucky, your journey into the wild Matrix will just involve icons taking unfamiliar shapes. That's disorienting, but you can live with that. It's when they work in some way other than expected, or when one "reality" of the host you're in phases out and another one phases in, that you might have your feet swept out from under you. And getting caught off balance is especially dangerous because of the next item.

- This is serious drek. There was one time I was in a wild host, and the sculpting was ... well, this is one of the challenges of the wild Matrix—trying to describe it often comes off like some street corner burnout talking about their latest tripchip flight. But it was like a kind of forest of rock spires that were tall, thin, and teetering, some with stairs winding up their sides, others with rickety ladders perched against them. The floor wasn't a good place to be—it was covered with caltrop-like spikes and prowled by wild programs that didn't seem to mind the spikes. So I was learning how to navigate by moving from spire to spire, often using ladders to propel me from one spire to another (which works in the Matrix because I'm so fragging graceful in there that I make Olympians look like cement-shoe-clad hippos), and at one point I was on a ladder that was at least twenty meters high, and only one foot on the highest rung, when the ladder abruptly turned into matchsticks and the ground was covered with straw. The movement of the ladder caused friction that set it alight, and it in turn set the ground on fire.

Long story short, I still feel traces of the headache I had when I finally logged out.

- Glitch
- I really need to get to know Glitch beyond his role as an admin here.
- Ma'Fan

PROTOSAPIENTS DON'T PLAY

Our knowledge of protosapients is still appallingly shallow. We can describe how they behave and make estimates as to their intelligence, but the mechanics inspiring them to action are mysterious to us. With physical animals, we understand the basic urges of survival and reproduction. But what are the instincts of a non-physical creature? It's difficult to say.

Sadly, this sometimes tempts people to a more lax sense of caution than they should have around these things. Since protosapients do not experience the same physical urges as temporal animals, the thinking goes, they cannot *hunger* in the same ways that other animals do. They cannot experience the same urgent drives that often push animals in the physical world to attack whatever food makes itself available.

Do not make this mistake. Do not think that the lack of a belly means protosapients are somehow calm or tame. They are not. They devour, regularly, and that fact does not change simply because we don't know why they eat or what needs drive them. And remember—their food of choice, and pretty much the only food available, is pure data. Which is what everything in the Matrix, including you, is made out of. So they may attack you. They may attack their surroundings. They may do just about anything and everything, but what they are not likely to do is sit down and rest. Without a physical body, they have no need of sleep. They do not get tired or out of breath. They keep moving.

I'm not saying any protosapients you encounter will inevitably be hostile, but you don't know what they will do or why. And whatever they decide to do, they will do with great gusto and no pause for rest.

- If you can get a long look at the base code of a protosapient—and somehow understand it—you'd have some info worth more than a few nuyen to a number of corps.
- Netcat
- Leave them alone. What did they ever do to you?
- Puck
- Wrapped a tentacle around my head and put some sort of needle into my brain that left my right arm twitching for like six weeks. Thanks for asking.
- Netcat

A FEW EXAMPLES

No one, of course, has exhaustively identified all, or even most, of the wild hosts out there, so don't expect to find anything close to a complete guide to them. But in case you want to try your hand at exploring some of these areas, here are some of the hosts I know about.

THE KNOWN UNIVERSE

This host revels in three-dimensional movement. Almost all of the locations in it are fairly small—a simple platform, a single-room house, or a three-flat brownstone are some examples. Gravity here is odd, working in whatever way each location requires. For a house or other building, gravity is whatever the orientation of the building determines is “down.” If it's a sphere (a small one—the largest spherical locations here are about a kilometer in diameter) gravity pulls you to the center of the ball, which presents a weird perspective as someone walks away from you and curves over the horizon. And typically on a platform, you can walk on either flat side. Movement from location to location is done by jumping and floating. While you can “breathe” anywhere in this host, once you're away from a location (like more than five meters or so) it's like you're floating in a zero gravity vacuum, with all the pleasures and difficulties that come with it. If you're floating between locations and are off track in getting to your desired organization, you need to make a course adjustment, which is not easy. Simply waving your arms won't do much to change your direction, because physics. Blowing does a little more, but if you need to adjust by more than a meter or so, you risk hyperventilation. Best solution? Program yourself up a can of compressed air or some sort of aerosol and use it as a mini booster engine.

- Aerosol? Come on—fire extinguisher! Go big or go home!
- Slamm-0!

So that's how you move around. But what can you find there? With the available plots of land being so small, the larger ones are treasured and frequently fought over. There is one house, a three-story Queen Anne-style home, that is treasured by many of the denizens of this host, and they fight over it frequently. They value the structure too much to directly bombard it, so the house



is the scene of various ambushes, sieges, and surprise attacks—so much so that spending any time inside the house is like living in a horror movie, where every distant thump or scratch on a window is a sign that something ominous is happening.

- The fact that there are a fair amount of cyberwerewolves in this host only adds to the horror.
- Netcat

The reasons the house is so valued are not entirely clear. Yes, it's large and comfortable, but is that really worth the cost of living in constant combat and terror? There has to be something else going on. Some people have posited that each location in this host actually corresponds to another place on the Matrix, and that controlling the location gives you extra advantages in whatever place it corresponds to. But I don't have clear information on where those corresponding locations may be, or what advantages are gained.

Perhaps more credible, in my mind, is that the house is a spawning ground for AIs and protosapients. I've never been inside, but reports say there is a basement door near the rear kitchen (yeah, there are two kitchens) that appears to lead to a basement, and there is a glow around the edges as if some sort of light is always on behind it. Behind that door, Matrix creatures are spawned, and there are many who would like to gain access to such a spot.

- The same people who wanted to "study" technomancers are highly interested in finding ways to essentially enslave AIs. The idea is that you'd get all the strengths of an agent, but the intelligence and creativity of a sapient being.
- Cosmo
- The idea is that anyone who would do that is a monster.
- Puck

All the locations near this house are staging or planning areas for beings who want to take it over. Beyond that? It's mostly unknown to me.

THE SINTAX LAIR

Want your mind blown into tiny particles of dust? Go here. You may have heard of SINtaxes, besuited and weirdly jointed beings that wander the Matrix and mess things up. Well, this spot belongs to them, and pretty much the rest of the Matrix is happy to let them have it. Descriptions

of this place are useless, because almost nothing conforms to reality as we know it. Even frequent metaplanar travelers find this place odd and disorienting. The best way to describe it is to think of a time when local noise totally overwhelmed your PAN, or something in your glasses or contacts or whatever viewing device you were using went on the fritz, so that instead of making AROs that looked like things you are accustomed to seeing, you got distortions and weird blocks of color, and nothing cohered into any clear thing.

Now make everything around you like that, all the time.

The exceptions to this are the SINtaxes themselves. They remain clear and sharp, for reasons I cannot begin to explain. They move through their blasted home, constantly re-arranging what already seems to be hopelessly distorted. At least they seem less jittery in this realm than they do in other parts of the Matrix, and they usually let non-SINtaxes pass by without harassment, or even attention.

There may well be some secrets buried in all the distortion, but damned if I know what, or where, it is.

- The secret of the SINtaxes' existence, and their purpose, might well be hidden in this host. The deeper the corps drill into the foundations, the more interested in that information they will be.
- The Smiling Bandit

THE KINGDOM OF VELKAR

I started with some weird and disorienting places, so let's end this section with something a little easier on the eyes, though no less confounding. The Kingdom of Velkar is the fantasy kingdom of your dreams. Snow-capped mountains rise into sapphire skies, where the clouds are light and fluffy, unless a dramatically appropriate storm is needed. Ivory castles overlook fertile valleys, and they have colorful pennants snapping in the breeze. Proud horses with mighty legs and flowing manes carry knights who wear armor that gleams almost as bright as their pure, white teeth. The occasional dragon wheels overhead, only to be chased away by fire emerging from the fingertips of a wizard standing watch in a soaring tower. The princes and princesses are all gentle, lovely, and forever waiting for some brave soul to come rescue them from whatever plight they have gotten themselves into. The ogres, trolls, and other creatures that roam the land are fierce and frightening, but still possess



a core dignity that is entirely unseen in ordinary wageslaves in our reality. You cannot enter this land without someone quickly running up to you with an urgent message that will send you on a vital quest to help save the realm from some danger or another.

Honestly, it's a lot of fun. But why is it there? What does it all add up to? Are the inhabitants of the land AIs? Programs? Is this some lost MMORPG that fell into a Matrix memory hole? I have no answers to any of those questions, because I've only had time to fulfill a couple of minor quests there, and every type of analysis I have tried to perform has been inconclusive. I'll tell you this much, though—I'm going back as soon as I can.

- How did I not know you have been there? Have you met LordThisslesmoke? Isn't he the worst?
- Slamm-0!
- Sooooo bad! I mean, literally, the worst! I really want to sit the king down and explain how badly he's being yanked around, but I can never get him to sit still long enough to make this clear.
- Pistons
- Wait, you've met the king?
- Slamm-0!
- Quick conversations, while he goes from one place to another, usually. Make a connection with Esdrilla, the castle steward. She can set you up and help you deal with the weird layout of Castle Stukoria.
- Pistons
- Esdrilla? I have problems with her. She usually doesn't say much to me, just walks past and glares.
- Slamm-0!
- Were you a dick to her at some point?
- Pistons
- Hmm. All right, you make a strong point. I'll try to make it up to her.
- Slamm-0!
- Aaaaaand I think that's enough of the local color for now. You guys can take your conversation elsewhere. But while I'm talking, let me ask this—is there any indication that any part of this kingdom existed before the Yellowstone Incident?
- Glitch

GETTING PAID

Now that we've covered a little bit about what you can expect to find in the untamed parts of the Matrix, let's take a look at who will send you there, because risking your brain for free is not something we should be doing.

EVO

Who else? Part of Evo's corporate culture is that they never know where the next marketable idea will come from. Look at the Monads. Did they plan that whole situation? Hell, no. They started looking at how to digitize consciousness. Then they helped foment an AI rebellion. Then some of those rebels came into new bodies, and Evo welcomed those that they could get along with. Then these individuals' new ways of thinking led to some of the killer new tech discussed in the *Street Lethal* download.

If Evo could get some marketable tech through that process, who's to say they won't find something by exploring the untamed parts of the Matrix? Untold software breakthroughs might be waiting there for them, and they will throw a little money in that direction to find them. So work your Evo contacts and convince them that you should be sent on safari. Be warned, though—if you don't show results before too long, you'll lose your funding. And maybe your thumbs.

- Don't just wander in with some hothead decker and think Evo will throw money at you. Significant programming skill is needed. Show them that you know what you're doing.
- Beaker

GRID OVERWATCH DIVISION

Yeah, that's right! You can sleep with the enemy! But the logic here is simple—who has more need to know about emerging Matrix threats than GOD? And where is the best hiding place for emerging threats? Plus, it's not like GOD agents have so much time on their hands that they can stage their own expeditions.

They're also not naïve. They know that the people with the skills, flexibility, and creativity to handle these explorations are likely to be shadow-runners, so they know that's who they will need to



hire. They're not overly strict about this—they fully expect most runners will have a brush or two with GOD in the past, and they're willing to overlook a fair amount of indiscretions. If you're on their most-wanted list or did permanent damage to one of their agents, you're probably out of the running. Otherwise, give it a shot!

- Yes, because I want to give more power to the people who try to make my life hell.
- Slamm-0!

- Who said the information you supply has to be accurate?
- Netcat

MITSUHAMA

- Oh, come on! GOD, and now this? What's the next entry, time-traveling Hitler?
- Netcat

Mitsuhamas are nowhere as loose and informal in this area as Evo, but they do plenty of tech work, so they might find value in some of your explorations. Just don't think you're going to go in cold. With MCT, your best bet is to find something on your own, then bring it to them and show them it's valuable. If you do that right, they may want exclusive rights to whatever you find next, and that means payment in advance.

The easiest way to get MCT interested in something is to show them some way it could be used in Matrix security. They love that drek. Show them a way to use a protosapien in some VR system, or hack your way through some particularly dense Matrix undergrowth and then show MCT the code that caused you so much difficulty. The best part of it is, you should know the weaknesses of whatever you give them better than anyone else, so you'll have a leg up.

- That last sentence should read "Leaving a backdoor for yourself should be a standard part of any code you ever give a corp. Also, share with your friends."
- Slamm-0!

RENRAKU

No corporation is as eager to learn about AIs they don't know about as Renraku. Need I say more? Convince them you'll dig up things they don't know about AIs, and they may send some money your way. It's that simple.

- Yeah, and if any AIs find out you squealed to Renraku about them, they'll be delighted! They certainly won't plot revenge!
- Puck

WUXING

Is there *feng shui* in the Matrix? There are spirited debates about this occurring inside Wuxing and its various subsidiaries, but there are enough people who both believe it's a thing and who have access to funding to give us something to do in this area. A lot of Wuxing's attention will focus on protosapients, due to their unpredictability and their tendency to mess up any hosts that they visit. Any info you can provide about keeping protosapients away, repelling them should they wander in, and repairing any damage they cause would be of interest to Wuxing. The other subject they're interested in is more complicated—the nature of foundations and how wild hosts sometimes spring up from them. My expeditions to these uncharted parts of the Matrix have not helped me understand this with any degree of confidence, but if you can do better than me, have at it.

- The upshot of this entire section is fairly simple: Corps like control and predictability. Encroaching chaos makes them nervous. Convince them that you can enhance the former and reduce the latter, and it can be worth money to them.
- Mr. Bonds





THE CORE OF CONSCIOUSNESS

POSTED BY: G-NOME
AND TECH-SPLORE

G: When Glitch posted **Untamed Wilderness** over in *Howling Shadows*, I don't think even he realized the massive can of worms he was opening up. And, I mean worms, literally! My work in the same drop has gotten me more fame than I cared for, and the attention of a particularly unfriendly group of runners who hate gnomes—me in particular—for reasons I haven't bothered to look up. Thanks to some assistance from a few members here, I built a debt. I agreed to pay off the debt by helping out a youngster with a similar focus in her life as me but a drastically different field of exploration. Tech-splorer was handed to me as a protégé of sorts, and I helped teach her that research and scientific endeavors in the Matrix are not so different from the physical world—many of the same principles apply. Together we delved into the Matrix, far and wide (this place is huge, FYI), and started hunting, studying, and discovering the virtual wildlife that Glitch was kind enough to brush the surface of. Cyberwerewolf may be a terrifying set of thirteen letters, but yogi beats it in scariness and has only four letters, though they are drastically different creatures.

T: Thank you, Grandpa G, for your stunning introduction. Now let the expert take it from here. I'll skip over the origin speculation because the research is garbage, just like the stuff they've done on technomancers like myself. The quick and dirty is, the Matrix got big and has grown beyond our understanding, and things have emerged from it across the kingdoms of life. Yes, that means there are emerged bacteria and several species of rather interesting phytoplankton, but what matters here is what matters to the shadows. In that area we focus on two things: what makes us dead, and what makes us money!

Let the good times roll!

TECHNOCRITTERS

First up on our safari of the Matrix are technocritters. Those adorable little Emergent species look just like your average animal but devour data like a deadly datavirus, or they make your virtual life miserable for no apparent reason. As I said, they're everywhere, but I'll highlight the exciting ones and let Grandpa G drop a note here and there, always preceded with a big G, so no one confuses my hip techno-savvy with his old-world jungle jabbering.

G: Thank you. Important to note here is that we have yet to record a member of every species, but based on current data and Emergence rates, the technosapience phenomenon will continue to increase, just as it has among metahumans. Also, much like those same metahumans, the fields of magic and Resonance do not mix. We have yet to locate an Emergent paranormal species, but we continue our search for what would be an extraordinary find.

- I'll just say this here at the start. Rumors are rampant that the entire goal of technocritter research is to locate an Emergent paracritter or find a way to develop Emergent abilities in a normal paracritter.
- Beaker
- I know full well the research funding for this entire G-Nome/Tech-splorer effort is being put up by Hestaby. I don't know her mind, but I can imagine this project has more to do with expanding her support base than actually developing an understanding of these new creatures.
- Frosty

Much like good ol' Glitch said in his initial evaluation, most of these Emergent critters seem generally similar across broad phylogenetic groups. Individual variations exist here and there but it has not been found in our studies that species vary on an individual basis or that major variances occur within any of our selected criteria.





The names listed below are a subspecies taxonomic addition that is used to indicate Resonance sensitivity and control. Example: Ursus Arctos Yogi is an emergent Brown Bear (in case any of you cared to be educated on the science side). If no one has managed to create a witty subspecies name, or hasn't named it after themselves or their pet cat, the Emergent subspecies is denoted with the *technicus* nomenclature. No, no one has been so bold as to tag metahumans with that, but that's just because the scientific community has gone soft and doesn't want to risk being overruled by some Corp Court bigwig with a hard-on for getting things named after them.

- Guess we know G-Nome's soft spot.
- Clockwork

YOGI

The ursines, or bears to the common folk, have been tagged with the adorable Yogi name, in reference to some ancient cartoon or campground or some such garbage. The original Yogi apparently had an insatiable appetite for "pic-a-nic" baskets, which observers (in this case G-Nome) translated into the Emergent bears' insatiable need to go after data and personas. This means the yogis are attracted to metahumanity in ways that don't balance well with their size and animal instincts.

Those "Do Not Feed The Bears" signs are easy enough to obey when they come looking for snacks to be tossed at them, but when they approach looking to devour your nav data, or contacts, or that special file you hide as "Old Text Files," you don't get a lot of choice unless you're running with some serious firewall.

That attraction also draws them toward labs and facilities buried back in the wilds for secrecy,

but the yogis can sniff them out like a deer carcass. They roam the periphery, sometimes getting enough little nibbles of data from straggling files and commlinks, other times pushing boundaries and testing security. Usually, after the first encounter, the security teams learn to shut down their wireless, but stupid is more common than smart in that field, so yogis can usually get two or three meals out of a sec detail before they realize what's going on. They often get a little meat in the deal too, when the guard decides to try to "unjam" his gun, not realizing it's a brick with no operating system because the yogi ate it, right before it ate him. This obviously affects us when we work a site that has a yogi about, by accident, but several of these facilities have a series of commlinks along the perimeter where they upload data to lure the yogis and move them around like guards walking the perimeter. When they get full, they either wander off, sit down and do nothing, or head out to feed their biological needs. They aren't easy to control.

G: The yogi is a high-value target for bounty hunters, but only live specimens earn the reward. No way to tell a regular bear from a yogi when they're dead. A standard and smart yogi hunt is like a step back in time. Hunters use blowguns, air-powered tranq guns with zero electronics, and even nets to try to snag these big beasts. Once they nab a target, the hunters have to keep them tranqed or have a sizable faraday cage, or else they risk having their stuff bricked by a napping bear.

- Faraday cages do a decent job to keep these things in check while they're being transported, but from what I hear, it makes them quite violent. Getting blocked from the Matrix angers them something fierce. Issues come up the moment they open the cage or the field gets broken. The yogi will go nuts.
- Stone



B	A	R	S	W	L	I	C	ESS	EDG	RES
9	4	5	8	4	1	2	3	6	3	6
Initiative	7 + 1D6									
Movement	x2/x8/+2									
Condition	13/10									
Limits	Physical 10, Mental 3, Social 6									
Armor	3									
Physical Skills	Gymnastics 3, Intimidation 3, Perception 4, Running 3, Tracking 4, Unarmed Combat 4									
Matrix Skills	Computer 2, Cybercombat 7, Electronic Warfare 5, Hacking 5, Software 6									
Complex Forms	Diffusion of Firewall, Infusion of Attack, Resonance Spike									
Powers	Armor (3), AR-Parallelism, Enhanced Senses (Smell), Munge, Natural Weapon [Claws/Bite: DV (STR+3)P, AP -1], Resonance Feed, Spraying, Traceroute									

B	A	R	S	W	L	I	C	ESS	EDG	RES
12	4	4	16	2	2	2	3	6	3	6
Initiative	7 + 1 D6									
Movement	x2/x8/+2									
Condition	14/9									
Limits	Physical 16, Mental 3, Social 5									
Armor	6									
Physical Skills	Clubs 2, Perception 4, Running 4, Unarmed Combat 5									
Matrix Skills	Computer 6, Cybercombat 4, Electronic Warfare 6, Hacking 5, Software 6									
Complex Forms	Diffusion of Firewall, Infusion of Data Processing, Pulse Storm, Resonance Veil, Transcendent Grid, Tattletale									
Powers	Armor (6), AR-Parallelism, Blend, Enhanced Senses (Low Frequency), Gremlins, Natural Weapon [Tusk: DV (STR+2)P, AP -2, +1 Reach], Tunnel									

PACHYDERMS

People have considered elephants some of the most emotionally intelligent creatures on the planet. The discovery of the *technicus* subspecies among the various pachyderm species only furthers this view. They are one of the few Emerged creatures that focus more on protecting data and electronics than on destroying them. The small remaining population of wild elephants means the *technicus* population is barely a handful, which makes them a prized commodity, especially among those with a flexible (or fractured) moral fiber.

The *technicus* pachyderm variant isn't a munging devourer of data. Instead, they gather near sites where other *technicus* species and technosapient come to corrupt the data of the world. In the wild, this often appears as pachyderms settling or moving into apparently unsettled regions, leading to the exposure of black sites and secret research facilities. The elephants' presence offers protection from mungers but opens the site up to potential runners who know about the variant species or can identify them with some level of accuracy.

G: The other side of the coin—that side where no one cares about the good or the positive—has corps and private collectors poaching these protected creatures to use as onsite security, or worse, simply as symbols of their wealth and power.

CROCODILIANS

Across southeastern North America, northern Africa, and all over southeast Asia, we put hundreds of metahuman-hours into seeking out and studying the various species of crocodilians. I'll admit the seeking out was made significantly easier by the fact that every one of these we discovered had developed strategies utilizing their Emergent talents for hunting. A common strategy was to attack vehicles traversing bridges in order to drop food into the water below, where the *technicus* hung out among mundane members of its kind, waiting like a mythical troll under a bridge. The concentrated population of crocodilians act as a protection for the *technicus*, while the *technicus* brings in more food than they could ever eat.

Facilities located near rivers inhabited by crocodilian species are often subject to attack, and several owners of these facilities offer bounties for any crocodilians caught near the facility. The majority of the creature needs to be brought in, and the head must be intact. Obviously they're used for research, but the fact that no Emergent talents need to be identified to collect the bounties is ridiculously inhumane. Then again, we're talking about soulless corporations, so it's par for the course.

- Al's on the Bayou is located about a kilometer from an MCT research facility in south Florida. They have some of the best gator tail and gator meat dishes in the area, and



everyone knows they get every bit of that meat from the corp down the road that pays to keep the swamps around it clear of gators.

- 2XL

B	A	R	S	W	L	I	C	ESS	EDG	RES
8	5	4	9	1	1	2	2	6	3	6
Initiative	6 + 1D6									
Movement	x2/x6/+4									
Condition	14/9									
Monitor										
Limits	Physical 10, Mental 2, Social 4									
Armor	6									
Physical Skills	Perception 4, Sneaking 4, Tracking 4, Unarmed Combat 4									
Matrix Skills	Computer 4, Cybercombat 8, Electronic Warfare 4, Hacking 5, Software 8									
Complex Forms	Diffusion of Firewall, Infusion of Attack, Puppeteer, Resonance Spike									
Powers	Armor (6), AR-Parallelism, Blend, Enhanced Senses (Smell), Natural Weapon [Bite, DV (STR+2) P, AP -2], Resonance Feed, Toughness (2)									

TESTUDINES

Trying to uncover a *technicus* testudine is quite the shell game. As punny and terrible as that sounds, it's actually not a joke. The *technicus* variant among every testudine species we managed to uncover had a similar perfection to the pattern of their shell. Sections were perfectly sized, and the patterns within each shell section, once analyzed, were fractals. The patterns are not easily identified by simple observation because the repeated pattern is often disrupted by scars or dirt.

Similar to pachyderms, the testudines have a protective rather than destructive nature when it comes to data and personas. The difference comes in the apparent psychology behind the action. Testudines tend to gather and hoard their acquisitions, often creating a virtual stockpile within the Matrix. The stockpile is held within a self-made host. This is the single most amazing thing about the testudine *technicus* group. As a whole they have the ability to create a small host, usually tucked away near a larger corporate host and siphoning off a small amount of processing power. The hosts are well hidden in the clutter of whatever Matrix traffic or detritus is in the area. Sometimes, a particularly sly *technicus* testudine will manage to hide its host within another host, like a tumor, or even drop their data well into the Foundation.

Turtles and their kin are historically well-known for their slowness, and that stereotype seems to carry over into the Matrix. They are remarkably slow to act, but they are relentless in their long-term operations, often working to gather or access data at a pace that can't be detected without complex algorithms or extended observation. This makes their hosts a great place to locate more broad-based paydata or older corp info for a prospective Mr. Johnson, but it also fills their little data nooks with bits and pieces of all sorts of other files, meaning you may go to snag a file for Mr. Johnson, only to find that a portion of the data is now missing, because a nearby *technicus* testudine has been nibbling away at it.

G: It is not outside the realm of possibility for a skilled wrangler to offer an e-turtle (I like that better) a place to hang and then occasionally pop in and sift through the data they've siphoned off of local sources. Moving around from place to place with the little guy can yield a lot of random paydata.

- Plus, most sheeple find some weirdo with a pet turtle to be odd. Odd enough that they leave you alone.
- Mika
- Personal experience?
- Ma'fan
- We all have a youth where we often leave behind all sorts of friends. Tank will forever hold a piece of my heart. He protected me from many an unpleasantry.
- Mika

B	A	R	S	W	L	I	C	ESS	EDG	RES
4	2	1	2	3	2	2	2	6	4	6
Initiative	3 + 1D6									
Movement	2/4/+0.5 (4/8/+1 Swimming)									
Condition	12/10									
Monitor										
Limits	Physical 3, Mental 3, Social 5									
Armor	8									
Physical Skills	Diving 3, Perception 4, Swimming 4, Unarmed Combat 3									
Matrix Skills	Computer 3, Cybercombat 4, Electronic Warfare 4, Hacking 4, Software 5									
Complex Forms	Diffusion of Attack, Diffusion of Data Processing, Infusion of Firewall, Pulse Storm, Resonance Hosting, Resonance Spike									
Powers	AR-Parallelism, Blend, Munge, Resonance Feed, Toughness (2)									



RESONANCE HOSTING

This power allows a small host to be created for the purposes of data storage and refuge. To create the host, the critter makes a Software + Logic [Data Processing] (1 week, varies) Extended Test, with each hit offering a point of rating for one of the host's attributes (i.e., Rating, Attack, Sleaze, Data Processing, Firewall). At least one point needs to go into each attribute before any others can be raised, and no attribute can ever be higher than twice the rating of the host. Once each attribute is at least 1, the host is created. Each week, the host loses a rating point from its highest attribute (gamemaster decides which to reduce in case of a tie).

PRIMATES

G-Nome and I spent several hours arguing over names to place on the Emerged primates in the world, but each of us managed to point out flaws or problems in every name we offered. The biggest problem was the massive range of variation among primates and the distinct identities of each. The closest we came up with was a reference to some one-hundred-year-old flatvid cartoon about thumb-sucking monkeys led by a monkey wizard. Needless to say, we didn't go with it and instead each have our own personal nicknames for the various *technicus* members of different primate species.

The naming issue was reflective of another issue we had during this study. His background in biological sciences and mine in computer sciences meant we came at the primates from two very different perspectives. I'm used to dealing with the most well-known primate of all, metahumans, and so I looked at other primates as they related to metahumanity. This perspective highlighted how often access to the Matrix pulled them closer to metahuman levels of thinking in my view (G-Nome made me say that last bit). Each of them did what I expect the earliest proto-metahuman tool users did among their kind, and that was to excel and push themselves to the head of the group. I've been corrected in this thinking by someone who thinks the guesses and made-up histories of other people are more valid, but I'll use this argument here, even if it never makes it into any deep science research paper in the future.

Emergent primates are some of the most highly variable technocritters out there. They still manage

to keep within a range of standard abilities, but the way they use their various abilities is highly reflective of the variations among the species themselves. The simpler monkeys, tarsiers, and lemurs tend to focus on small acts of mischief that gain them nibbles of data, files, and food. Their actions are rarely life-threatening and only cause large amounts of Matrix damage when several happened to be gathered in the same place. This isn't an issue in the wilds, where being able to access the Matrix is a distraction and likely decreases the population a fair amount, but in urban centers where wild populations are common, especially in places like the Indian Union and all over Southeast Asia, large populations of these smaller primates are common.

The various ape species, likely due to greater cranial capacity, tend to have greater control of their abilities and an easier time managing the split between worlds. They can rapidly differentiate between objects in the real world and AR objects, often destroying the latter as part of their natural habits. Speculation among myself and G-Nome points toward a "purification" of their world. They want the world to remain natural, and thus they remove anything that doesn't belong. This tends to include removing AROs from researchers and sometimes directly attacking or smashing a piece of gear that may be generating a signal or icon.

G: I once thought dealing with feces-flinging Pans was among the worst things ever. Then we came across these. Having dung flung at your head pales in comparison to having your personal files and data ripped from your link and cast into the Matrix for public consumption. Innately mischievous, as if access to the Matrix touches at the darkest part of their minds, *technicus* primates range from impish devils of the Matrix with the weakest of their kind to fear-flinging, Asag-level demonic horrors of chaos and destruction. Abacus, the Emerged master of the Henry Doorly Zoo in Omaha, UCAS, is an example of the latter. Observing any of these beasts is a dangerous endeavor, as they have little problem tearing into your Matrix gear. Most of them have managed to gather a collection of drones and other devices they've dragged out of the sky or snagged from others who wandered too close.

I am surprised my colleague didn't mention the **void ape**, which is the name we gave an Emerged Cross River gorilla that secluded itself to an isolated section of the forest and then systematically



destroyed every real-world object within one hundred meters before settling into a central area and seeking only AR objects as part of its realm. The space it inhabits has grown several times, as observed through satellite footage, and we discovered the population has increased to three over time. We were told about this “efu nwa” while in Lagos, and we added it to our research list as a side note. The “black empty,” as it translates, could have been any one of a hundred local legends, but it was associated with a gorilla. I figured it could be a parasppecies, and I had no problem checking it out while we were in the field anyway. The void ape clears away everything that isn’t AR from a space and then pulls in and finds ways to add AROs to its clearing. This means there are bits of drones, vehicles, electronics, guns, and other gear lying about the clearing or tucked just below the bed of detritus and dirt the void apes have left.

T: I didn’t mention it because it scares the piss out of me and was, hands-down, the most electronically eerie and uncomfortable place on the planet. It’s like a graveyard of fading and dying tech. As the batteries run low or cells barely offer power, the objects flicker in and out of existence, often going ghostly as juice runs low. If the device happens to have a solar or heat induction recharge

rig, the items reappear by day and then slowly fade out through the night. Oh, and I checked it just before sending this off—the base clearing now has a 147.7 meter radius, and there are two more cleared areas expanding nearby.

- Interesting. I’ve heard of places like that in the slums of New Delhi, also associated with the local monkeys that roam the region. I imagine it’s eerie in the jungle, but imagine one of these voids in a massive urban sprawl that is usually crawling with people and things, and suddenly you have a space the size of a football stadium where objects and buildings have been smashed and dismantled, but the whole place is wall-to-wall AROs.
- Traveler Jones

GEF

Never underestimate the amount of information one person can have on a single subject. That’s the lesson I took from trying to argue with G-Nome about why we should lump the gef, the *technicus* mongooses we discovered, in with the iPodos. Not only did he school me on the vast differences between the two in classification, but he also went on to actually pull up virtual skeletons to point out differences in structures, followed by a long diatribe on the behavioral differences, and finally a titillating dissertation on cultural and geographical variations between the two, including the strange legend that gave us the name “gef.” At some point I either have to learn to shut up and not open my mouth on topics I don’t know about, or pick up a book beforehand and maybe show him I’m trying. That’s my relatively brief way of pointing out to the readers that they’re different.

From a Matrix activity standpoint, they’re drastically different, but their efforts in one reality often mirror their efforts in the other. The classic battle of mongoose and cobra plays out in the Matrix as gef vs. ahi. So much so that fight promoters in the Indian Union pay big money for the capture of both ahi and gef, so that they can put on a crazy fight that spans both the Matrix and meatworld. Gef are fighters, and their Resonance talents reflect that in a big way. They focus on locating and destroying their prey.

G: The gef are far more violent than their mundane kin. Their access to the Matrix seems to make them hyper-aggressive, and even the smallest activity can be seen as a threat. They’re known for attacking prey and targets that are significant-

B	A	R	S	W	L	I	C	ESS	EDG	RES
4	4	4	4	3	2	5	3	6	3	6
Initiative	8 + 1D6									
Movement	x2/x4/+2									
Condition	10/10									
Monitor										
Limits	Physical 6, Mental 4, Social 5									
Armor	0									
Physical Skills	Athletics skill group 4, Clubs 3, Perception 4, Thrown Weapons 2, Unarmed Combat 6									
Matrix Skills	Computer 6, Cybercombat 5, Electronic Warfare 5, Hacking 5, Software 5									
Complex Forms	Derez, Diffusion of Firewall, Editor, Infusion of Sleaze, Puppeteer, Resonance Spike, Tattletale									
Powers	AR-Parallelism, Brachiation, Natural Weapon [Bite: DV (STR+2)P, AP —], Resonance Feed, Tunnel									
Note	The wide variety of primates on the planet prevents all species from being represented here; these physical stats are based on a chimpanzee. Physical stats may be changed by up to 3 based on different types of primates, so that lemurs, for example, would have Agility and Reaction increased and Body and Strength decreased, while the opposite would be true for gorillas.									





ly larger than themselves. Snakes are the most common target, and gef have been observed to use their own abilities in order to gain advantage over even mundane snakes, hacking and activating heating systems to obscure themselves in the warm air, activating hot devices in order to distract the snakes, releasing chemicals into the air to mask themselves, and even activating drones as bait for strikes. They're naturally wily, and offering them access to other avenues has only made them more willing to go after larger and larger prey.

B	A	R	S	W	L	I	C	ESS	EDG	RES
1	6	7	2	2	1	4	3	6	3	6
Initiative										8 + 2D6
Movement										3/16/+1
Condition										7/9
Monitor										
Limits										Physical 4, Mental 3, Social 5
Armor										0
Physical Skills										Gymnastics 6, Perception 4, Tracking 4, Unarmed Combat 6
Matrix Skills										Computer 3, Cybercombat 6, Electronic Warfare 2, Hacking 4, Software 4
Complex Forms										Diffusion of Attack, Infusion of Attack, Puppeteer, Resonance Spike
Powers										AR-Parallelism, Enhanced Senses (Low-Light), Natural Weapon (Bite: DV (STR+1)P, AP —, —1 Reach], Resonance Feed, Traceroute, Venomous Code
Weaknesses										Fragile (2)

IPODO

I totally gave into the cheesy name when Grandpa G slipped me a hot-simmered version of a kid watching the 1980s B-rate classic, *The Beastmaster*. I have no idea how he got it, or even more mysteriously, why someone made it, but in the end it convinced me that Podo and Kodo, a pair of thieving ferrets, are two of the coolest creatures in cinematic existence. That, combined with the entertaining flash of iSomething devices from Ares subsidiary Apple, made me accept this silly and singular name for another massive group of critters. They are well-known for their natural affinity for item acquisition and some for their downright meanness, but all of the IPOdo animals are excellent data thieves, only varying their style based on whether they are more Kodo, in that they are leaping on faces and killing things, or Podo, sticking to the sneaking, stealing, and slipping past defenses.



Man, that movie can scar a kid. Personally, I'm just impressed at the level of skill this group has at accessing things they shouldn't be able to access. Plenty of the data gets nibbled and munged, but even more gets snuck over to their private stashes. They love stealing data, copying it, deleting it from its original location, and then pasting and hoarding it to personal computers and other devices they manage to find. Sometimes, they even manage to use some seriously ancient tech, connecting to it through their natural abilities and Resonance. Data miners or runners looking to snag a bit of missing data or dig up some paydata can trail wild iPodos or locate urban ones to find bulky caches of data. It's not always complete—they nibble bits here and there and sometimes don't even bother to grab whole files, but you can guarantee there will be something useful, or at the very least, entertaining, within the bits they manage to snag.

G: Let's clear up some biology that my apprentice, for some reason, failed to provide. The adorably named iPodo represents all of the *technicus* mustelids. The mustelid family consists of not just the ferrets, but also weasels, polecats, stoats, minks, otters, badgers, tayra, grisons, and wolverines. This is a globally successful family consisting of both terrestrial species as well as aquatic variants that inhabit marine and freshwater regions. Several species have come to be taken as pets, as well as resource animals, leading to a large urban population in both singular captivity or in small family groups in the wilds after escape or release. Large groups of resource animals, especially minks and a few of the more exotic-coated weasels and martens, are farmed and have thus created a focal population of breeding creatures, all with access to the Matrix provided by their farms. As one might expect of a cunning creature, captivity has been hard to maintain for populations with a iPodo among them. These farms, along with zoos around the world, have seen a consistent string of mustelid escapes. These escapes are usually en masse, as the iPodo releases others of its kind in the process, but singular escapes have also been known to occur.

- That's funny. I looked up that movie—oh ghost, it's terribly wonderful—and I know a kid named Dar who has a pair of pet "ferrets" named Podo and Kodo. The quotes are because Podo and Kodo are actually greater grison (I looked it up). He claims to have picked them up in Cancun on a vacation, and the three of them hacked the cruise ship, customs, and the airline to get them back to the

states. They're both *technicus* and he's a technomancer. They live near St. Louis, and he's developing quite the rep for having the right data or knowing how to get the right data, likely with the help of his little friends.

- /dev/grrl
- Can't imagine what the infamous honey badger does with tech and data it gets its mental claws on. Probably need some form of repair program to gather any useful data that one of those things might have gathered.
- Slamm-0!

B	A	R	S	W	L	I	C	ESS	EDG	RES
1	2	2	1	4	1	2	3	6	5	6
Initiative										4 + 1D6
Movement										x2/x6/+4
Condition										8/10
Monitor										
Limits										Physical 2, Mental 3, Social 6
Armor										0
Physical Skills										Gymnastics 3, Perception 3, Sneaking 3, Tracking 4, Unarmed Combat 3
Matrix Skills										Computer 5, Cybercombat 3, Electronic Warfare 5, Hacking 6, Software 5
Complex Forms										Diffusion of Firewall, Diffusion of Attack, Infusion of Sleaze, Pulse Storm, Puppeteer, Resonance Spike
Powers										AR-Parallelism, Blend, Gremlins, Holographic Concealment, Munge, Natural Weapon [Bite: DV (STR+1)P, AP —, 1 Reach], Resonance Feed, Tunnel
Weaknesses										Fragile 1
Note										The physical stats given are specifically for ferrets, but they generally reflect this group. Add 1 to all physical stats for otters and badgers; add 2 for wolverines.

ENERGIZER

There are plenty of famous bunnies and rabbits for these to get named after, but Energizer was our hands-down favorite. First observation we made was the sudden jump in processing power that any system gets when accessed by an Energizer. It's universal in its effect, and whether or not this is beneficial to the creature, it happens. The processing boost is usually quite beneficial as the Energizers usually gain access to a host or device and then immediately begin replicating files. The process has a twofold gain, the flood of activity masks the presence of the critter in the Matrix and offers a massive abundance of data to snatch, snag, and snack on. The data copies usually flood the memory of the device in question or throw a host into a sea of file copies to muddy up all the other activities on it.



G: Energizers come from the family Leporidae, which includes rabbits and hares. Domestication and urbanization have shifted the wild rabbit and hare population, creating a clear distinction between those species that are still wild nature dwellers, and those that have adapted and begun to evolve for urban life. Between pet releases, test-subject escapes, and the destruction of natural habitats forcing populations to shift, many major urban sprawls have large leporidae populations. One of the best and earliest is Pretoria in South Africa, which boasts several paranormal variations of local hare species as well as a strong population of Energizers. Chicago, Dallas-Ft. Worth, Montgomery, Calgary, and Brussels also held populations we studied, with all but Chicago's arising from some form of lab escape. Chicago's population release occurred when the city got shut off from the world thanks to the insect spirits, leading to an even larger and more widespread region of development for the critters.

- Thanks to a still-existent German subculture and abundant rabbits, you can get some of the best hasenpfeffer in the world in the CZ. They have a lot of local variations, but several cooks in the area keep a solid traditional spin on it. It is amazing.
- Traveler Jones

B	A	R	S	W	L	I	C	ESS	EDG	RES
1	5	4	1	2	1	3	3	6	8	6
Initiative	7 + 2D6									
Movement	5/30/+2									
Condition	5/9									
Monitor										
Limits	Physical 3, Mental 3, Social 5									
Armor	0									
Physical Skills	Gymnastics 4, Perception 6 (Hearing +2), Running 8, Unarmed Combat 2									
Matrix Skills	Computer 4, Cybercombat 2, Electronic Warfare 5, Hacking 5, Software 5									
Complex Forms	Diffusion of Attack, Infusion of Data Processing, Pulse Storm, Resonance Spike, Resonance Veil, Static Bomb									
Powers	AR-Parallelism, Blend, Enhanced Senses (Wideband Hearing, Low-Light), Holographic Concealment, Resonance Feed									
Weaknesses	Fragile (4)									

G33K0S

These are the most obnoxious little bastards on the planet, and I'm going to jam the name I'm giving them down everyone's throat because every little

one of these things should be geeked! G-Nome had issues with the primates; I have major issues with these little gear-trashing monsters. I have no problem with a technocritter that wants to start slinging code to trash my gear. I can defend against that. Problem is, these little bastards sneak in when you aren't using your gear, or even sneak onto you when you are, and then they overheat your stuff to give them some warmth. This isn't acceptable. Come at me on the Matrix, but don't be creeping into my pocket or my gear bag and making my 'link get sizzling hot because you have serious temperature issues. If you didn't want to be cold-blooded, you shouldn't have evolved that way. I know that's not how it works, but I'm pissed.

G: Had to get one of these away from the edit program before he fried a circuit in his own brain instead of the antique (but fully functional) Atari 2600 that got melted down by a lizard we picked up in Florida that climbed into his luggage. The little guy sensed the early-generation wireless connector and hooked itself up, using its ability to offer a small power boost to light it up long enough for re-programming. I don't know why so many of these critters can interact with old tech, but research is underway.

One already apparent fact about the g33k0s is that they are expanding their habitat. They are shifting to places lizards aren't normally present because of their ability to overheat devices and use that heat for a nest and eggs. Major structures in cities all over the northern and southern hemispheres are getting lizards. They hitch a ride with travelers, cooking some of their equipment for warmth, and eventually find a place to settle and then expand from there. They're a primarily indoor problem in most cooler cities, but summer months allow for extensive expansion and invasion. They aren't an apex-level species, but they still rock the local ecosystem boat. They also breed true at an astonishing rate, varying from seventy-five percent to one hundred percent in broods that we have studied. I have almost all of the data correlated, and it appears the *technicus* trait in most of the small lizard species relates to egg temperature during incubation, similar to crocodilian gender being determined through temperature-dependent sex determination, or TSD.

- I've known about these things for awhile. I've spent a bit of time in building vents, and these little lizards love to use them to move around buildings and look for their next bit of gear. I actually caught a few of them and bred them.



I've used them on a few jobs, releasing them into a secure building area to soften their systems and create issues other than the sly thief sneaking in.

- Mika
- Caught?
- Ma'fan
- Ever keeping me a little honest, eh Ma'fan? Sure, they got into my gear. Lost a burner 'link (haha) but gained a great new tool.
- Mika

B	A	R	S	W	L	I	C	ESS	EDG	RES
1	4	4	1	2	1	3	2	6	2	6
Initiative	7 + 1D6									
Movement	2/8/+0.5									
Condition	3/9									
Monitor										
Limits	Physical 3, Mental 3, Social 5									
Armor	1									
Physical Skills	Gymnastics 3, Perception 4, Running 2, Unarmed Combat 2									
Matrix Skills	Computer 3, Cybercombat 3, Electronic Warfare 5, Hacking 4, Software 4									
Complex Forms	Diffusion of Attack, Diffusion of Firewall, Infusion of Sleaze, Pulse Storm, Puppeteer, Resonance Spike									
Powers	AR-Parallelism, Blend, Cozenge, Holographic Concealment, Resonance Feed									
Weaknesses	Fragile (6)									

RYBBYTS

Yup, it's time to talk frogs and toads that can, for some ghost-only-knows-why reason, connect to the Matrix. I'm not sure why I feel like this is the one category of animal that just shouldn't have a place in the Matrix, but I do. With said belief, I put a lot of effort into ignoring any and all value these brought to the table, and I might have actually put some effort into sabotaging some research stations G-Nome and I set up.

Does that really sound like me? If you don't know me, it doesn't, but that's what G-Nome saw when he checked out the footage from the stations we set up near every ghost-damned monitoring station for any kind of frog or toad. From the depths of the Amazonian jungle to the deserts of the PCC, every single piece of data featured edited footage, usually compiled from additional files located on our own commlinks. The rybbyts hack in, snag bits of video and audio footage, and then splice it into

the feed watching them. One particularly creative one spliced in footage of a behemoth (the Awakened alligator) over itself. That one went viral on the Matrix, but I digress. This particular group likes to edit things. They change the footage of monitoring stations they get near—trideos, videos, cameras, microphones, and anything else short of a sim-feed (note to self: research sim mods with frog species) gets tweaked with its own data or data taken from other nearby feeds. Often, the images make no sense. They aren't intelligent, just capable of editing and hacking, but a loop doesn't have to be complex to mess up a security feed. Obviously an option for the folks reading this!

G: First, stop saying frogs and toads. Toads are frogs. It's like saying frogs and more specific frogs. As a group, frogs live everywhere but the coldest northern and southern reaches as well as the deep desert, but that's their only limitation. They're in your local creek, they're in local pet tanks, and they're hopping along the roads, forests, jungles, deserts, and swamps of the world. The rybbyts are just as spread out, with an apparently higher rate of *technicus* evolution in species with more urban and suburban contact, but the globalized grid could very well be increasing Emergence in more reclusive species.

While I was initially very angry at Tech-splorer, I have since moved past any errors on her part to look at this editing ability as a form of camouflage. No matter what form of vision or audio detection system you are using, the rybbyts are going to avoid detection. Sure, you can analyze their presence, but you can only study this footage in the way astronomers study black holes by how they affect what is around them, rather than seeing the black hole itself. This meant I had to push my normal natural research habits and capture a few Emergent species to watch in captivity. Their editing can affect anything they can gain access to, and they try to access everything.

While small anomalies are usually common with individuals among a group of *technicus* species, the rybbyts pose an interesting divide between the various poisonous and non-poisonous member species, with poisonous variants actually possessing an aggressive nature. This is strange as the species themselves are not normally aggressive, they simply possess an aposematic coloring system as a defense, not as an invitation to a fight. This interesting phenomenon among these poisonous frogs offers a greater ability to actively



damage devices with polluted code. This anomaly led to extensive further research, and their “poisonousness,” or ability to attack with viral code, also seems to mimic many species’ use of the diet-toxicity hypothesis, correlating toxicity with a diet of poisonous insects. In terms of code, they take or destroy bits of corrupt code in order to be able to deliver it back in the form of an attack or a viral code insertion.

- I didn’t have a biologist or anything of the sort, so I didn’t perform research and can’t be sure, but I am nearly positive two of my squads got tapped by these little bastards during ops in Amazonia. Edits were found in their footage, often with strange or non-sensical changes, and quite a few pieces of tech got bricked by a code hit that our tech team later compared to a Matrix punji trap. A bunch of little defense holes were created, and a bunch of feces and infectious drek-code was left behind.
- Picador
- If you’ve got cybersenses, whether eyes and ears or just eyes, you can use a small collection of rybbys to give you quite the trip. It doesn’t have the otherworldliness of drug-induced hallucinations, but it still gives you the whole “I’m seeing things” sensation. There’s several rumors of a PCC training regimen used for the PhyCy Ops guys. Once you get visual or auditory systems replaced, you have to go through training to operate blind or confused because the systems can get hacked. To offer the most whacked-out drek possible, the PCC supposedly uses rybbys.
- Stone

B	A	R	S	W	L	I	C	ESS	EDG	RES
2	3	2	1	2	1	2	2	6	3	6
Initiative	5 + 1D6									
Movement	2/10/+1									
Condition	4/9									
Monitor										
Limits	Physical 3, Mental 3, Social 5									
Armor	0									
Physical Skills	Diving 2, Perception 4, Swimming 4, Unarmed Combat 2									
Matrix Skills	Computer 3, Cybercombat 4, Electronic Warfare 4, Hacking 4, Software 5									
Complex Forms	Infusion of Attack, Editor, Pulse Storm, Puppeteer, Resonance Spike, Static Veil									
Powers	AR-Parallelism, Blend, Natural Weapon (Tongue: DV [STR]P, AP —], Resonance Feed, Venomous Code									
Weaknesses	Fragile (5)									

TECHWORMS

I gained a greater understanding of how hard it is for scientists to determine the nature and origin of the technomancer connection after our research into the Emergent worms we call techworms. Small, simple brains, but they can still tear up a firewall and completely obliterate it with enough of them working together. They infect devices with program worms (aptly named) and viruses intended not to just create those aforementioned holes in the firewall but to decrease the overall productivity of the system and sap some of its power for themselves. We checked out common earthworms first but eventually expanded our studies to parasitic worms, which can make life exceedingly difficult for anyone using or near tech once they get settled inside. We even went to Africa, where I got introduced to the giant African earthworm. The emergent specimen we found was only 1.4 meters, but G-Nome found us several larger specimens, including a 4.8-meter monstrosity that is still giving me nightmares.

G: I personally wanted to bring that beautiful beast home with me to help sort out my garden soil, but since our return from Africa was already costly enough, I couldn’t justify the funds to haul it home. Had I known how scarred Tech-splorer was, I would have ditched the case of Zulu hooch. On a serious note, the worms of the world are obviously touched by whatever evolution created technomancers. Our evidence ranged from earthworms to parasitic intestinal and subcutaneous worms, but efforts are in the works to seek marine techworms for study. Their distribution isn’t as friendly for study, though, especially with the uptick of leviathans asking questions of every metahuman under the surface.

While we focus here on the detrimental effects connected to the Matrix, don’t forget that most of these parasitic worms bring with them plenty of other issues, some life-threatening. Getting one that happens to be able to mess with your tech could be a gift of ghost in disguise, because I know most people are far more likely to notice when their commlink keeps shorting out than when they are having odd cramps and eating for two but losing weight.



B	A	R	S	W	L	I	C	ESS	EDG	RES
1	1	1	1	2	1	1	1	6	1	6
Initiative	2 + 1D6									
Movement	0/0.5/— (0/0.25/— Burrowing)									
Condition Monitor	1/1									
Limits	Physical 2, Mental 2, Social 4									
Armor	0									
Physical Skills	Perception 1, Swimming 1, Unarmed Combat 1									
Matrix Skills	Computer 2, Cybercombat 2, Electronic Warfare 3, Hacking 2, Software 2									
Complex Forms	Diffusion of Attack, Diffusion of Data Processing, Diffusion of Firewall, Diffusion of Sleaze, Tattletale									
Powers	AR-Parallelism, Blend, E-hive, Resonance Feed									
Weaknesses	Extra Fragile									

DOT-CAMEL

As one might expect, getting a signal in the desert is tough. Distant towers and devices, poor satellite coverage, abundant silica and dust creating static and interference—all of those combine to make online life difficult. Enter the dot-camel. The standard dromedary, along with several other camel species, have some remarkable and, based on our research thus far, unique abilities. The dot-camel has two special talents, acting as both a desert-crossing signal booster and a virtual datastore. The signal boost is mainly for their own good feeling, allowing connections to the Matrix when far from civilization. When near civilization or just some random tech, they download data to their own virtual datastore, like a hump for data instead of water-rich fatty tissue. Several groups of desert nomads use them as secure data storage by cultivating them and selling the service to those seeking to hide or store data away from prying eyes.

G: My intrepid protégé is so excited by the dot-camel and its desert home, she tends to overlook the brief stint we did in the mountainous regions of the Indian Union and western South America, where we confirmed the existence of other *technicus* camelid species, specifically the alpaca and llama in South America and the Indian camel in the Indian Union. We also identified bactrian camels, the two-humped variety, as having *technicus* variants as well, but Tech-splorer couldn't manage to keep a straight face when talking about them, constantly referring to them as "lucky camels."

- Qet is a data broker in the Andes. He accepts info via sat-link, then loads it into one of his dot-camel alpacas or llamas—I don't know or care to know the difference. The heard roams mostly free in the mountains near his base. He has tags on all of them and knows which ones are storing what. It's a sweet setup, and he keeps the list of what's stored where in a ledger written in Olmec for protection
- The Smiling Bandit
- I've used Qamil, who operates out of Morocco, as a datavault before. He uses the dot-camel method, sending them out with his nomadic security team.
- Ma'fan

B	A	R	S	W	L	I	C	ESS	EDG	RES
10	3	3	8	3	1	3	4	6	3	6
Initiative	6 + 1D6									
Movement	9/30/+6									
Condition Monitor	17/10									
Limits	Physical 10, Mental 3, Social 6									
Armor	4									
Physical Skills	Gymnastics 3, Perception 3, Running 6, Unarmed Combat 3									
Matrix Skills	Computer 4, Cybercombat 4, Electronic Warfare 6, Hacking 6, Software 6									
Complex Forms	Diffusion of Attack, Diffusion of Data Processing, Infusion of Firewall, Pulse Storm, Puppeteer, Resonance Channel, Resonance Hosting, Resonance Spike									
Powers	Armor (4), AR-Parallelism, Blend, Gremlins, Natural Weapon (Hoof: DV (STR)P, AP —, +1 Reach), Resonance Feed, Toughness (4)									

E-FISH

As anyone who has ever done any diving, fishing, or study of marine life knows, fish come with a level of variety matched only by bugs. They are crazy and abundant, but as most fisherman know, they tend to congregate near ample food supplies. The e-fish tend to be most common in freshwater and coastal species as they're closer to civilization, though several have emerged around aquacologies and other aquatic habitats with intense Matrix infrastructures for the e-fish to interact with, though spotting the one among the many is nearly fraggering impossible. They tend to move in numbers and eat tiny bits of data, corrupting it in small ways rather than destroying it completely.

G: The vast array of species and the quantity of fish in the waters of this vast planet made the study



of e-fish exceptionally difficult. I am not entirely convinced we can log them all into a single group, but we found very little variation among the abilities and Emergent gifts of the various subjects we studied. More exotic fish species or groups in un-studied regions may prove different, but for now, all the e-fish we came across were similar.

B	A	R	S	W	L	I	C	ESS	EDG	RES
2	2	3	2	2	—	2	1	6	3	6
Initiative	5 + 1D6									
Movement	x2/x6/+2 swimming									
Condition Monitor	9/9									
Limits	Physical 3, Mental 2, Social 4									
Armor	0									
Physical Skills	Gymnastics 3, Perception 3, Swimming 6, Unarmed Combat 4									
Matrix Skills	Computer 2, Cybercombat 5, Electronic Warfare 4, Hacking 5, Software 4									
Complex Forms	Derez, Diffusion of Firewall, Infusion of Attack, Pulse Storm, Puppeteer, Resonance Spike									
Powers	AR-Parallelism, Blend, E-hive, Enhanced Senses (Smell), Gills, Munge, Natural Weapon [Bite: DV (STR+1)P, AP —], Resonance Feed									

RAVAGERS

Here's a fish exception, not that anyone wants a scientific explanation of the differences between bony and cartilaginous fish species. Emerged sharks give metahumans a whole new reason to fear their toothy maws. The deep blue sea is a rightfully terrifying place. We aren't great swimmers. We can't hold our breath long or see well beneath the surface. Our best, commonly identified defense is to punch them in the snout or gouge out an eye. Not the best strategy in a fight where you're seriously outmatched across the board, but it's the best we can do against something that has been on this planet and killing for millions of years. "Efficient predator" is an understatement when it comes to most sharks.

Now let's step their game up. You go out on that nice twenty-meter yacht. You plan to do a little deep-sea fishing, maybe go after a marlin or a nice swordfish. You're a couple of klicks off-shore and feeling good because your fish-finder is ping-ing some big boys at the right depth for a nice metric ton of swordfish. You set to fish, drop the line, and then wait for the fight while your buddies are lining up the soy beers for the afterparty.

Suddenly, your fish-finder is tracking something else. Then it loses power. Then your commlink reports an attack event. Then it shuts down. Then the boat's control systems go haywire and the boat starts full reverse. At the same time, the pumps activate, but the whine is off. They're in reverse and pulling water in, rather than pushing it out. The water lapping over the aft deck is pooling below, and you notice the boat is riding lower and lower in the water. And then, you see the fin peak above the water for a moment. The rest is the slow build of fear, the fight to regain control of a boat that is doing everything in its power to become a submarine, and the eventual wait in the water for the ravager—or worse, ravagers—to come.

G: As my story-spewing associate pointed out, the ravagers are known for attacking boats in an effort to strand them, sink them, and get the delicious bits of meat on board. They are unlike most species of sharks in their pack hunting talents, and often cross species barriers in order to work together. When operating in groups like that, the sharks develop a hierarchy. Great whites tend to be the top, hammerheads next, makos and tigers behind them, and then the bulk of the smaller species filling in. Occasionally these change if a particularly large or small specimen is in a group, because it's almost always based on size.

These groups will often go after fishing trawlers to sink them for the fish on board, as well as the chum. At least one group that was operating out of the Caribbean/Atlantic border region is rumored to have crashed ships together. This rumor is only topped by the North Atlantic group that supposedly hacks the ships and uses them to herd fish for them, rather than catching them as they're supposed to.

- This is horrifying! Kane, how do you live out there?
- Slamm-0!
- Have you met /dev/? I'm far more worried for the ravager that gets in range of her deck. Stunned sharks don't swim well, and as most folks know, an immobile shark is not long for this world.
- Kane
- I actually managed to snag one of those sweet hunter decks. I had it modded for underwater use, and we have cages on several ships to drop me in the water with the big fishes. I got no problem going toe to fin with a ravager. Thing that usually makes me angry is that the other ones usually get the meal. I *love* shark steaks.
- /dev/grrl



B	A	R	S	W	L	I	C	ESS	EDG	RES
5	4	5	5	3	1	4	1	6	2	6
Initiative										9 + 1D6
Movement										x3/x8/+4 swimming
Condition										11/10
Monitor										
Limits										Physical 7, Mental 3, Social 4
Armor										2
Physical Skills										Perception 6 (Smell +2), Swimming 10, Unarmed Combat 8
Matrix Skills										Computer 5, Cybercombat 8, Electronic Warfare 5, Hacking 4, Software 6
Complex Forms										Diffusion of Data Processing, Diffusion of Firewall, Infusion of Attack, Pulse Storm, Puppeteer, Resonance Spike, Static Bomb
Powers										Armor (2), AR-Parallelism, Blend, Gremlins, Natural Weapon [Bite: DV (STR+2)P, AP -2], Resonance Feed, Traceroute, Tunnel

MIGALOO

Due to the vastness of the seas and the depths at which most whales hang out, tracking and identifying emerged specimens is not easy. In fact, we have yet to actually see a single one, but we still have proof of their existence. We have recorded eight different instances where coded interference reached a harbor or threatened a boat that managed to chase off or detrimentally interfere with the activities of other emergent species in the area as well as technosapients operating near coastal regions or around aquacologies. This interference corresponded directly with the arrival of whale song on long-range sound-detection systems. My analysis, which includes running it against the Albumont-Harkinbregger algorithm for Matrix discordant signal attrition, revealed a code embedded within the song that accesses Matrix devices in range and builds a signal-disruption field that can rival mil-spec jammers or top key-jocks shredding noise code on the fly.

G: We were not able to locate any singular specimens, but we were able to isolate at least six distinct voices in the songs. A genuine encounter is never likely to occur, as whales have been avoiding us for decades, likely due to the Sea Dragon communicating with most of them from the moment she awoke. Which puts me almost as far afield as Tech-splorer gets sometimes. Hm-mph. Anyway, the point is that whales seem to be playing the saviors of the seas, actively working

against violent or malicious Matrix inhabitants at sea or near coastal cities with deep enough inlets.

B	A	R	S	W	L	I	C	ESS	EDG	RES
20	4	4	30	4	2	4	4	6	3	6
Initiative										8 + 1D6
Movement										10/30/+4 swimming
Condition										28/12
Monitor										
Limits										Physical 28, Mental 4, Social 6
Armor										20
Physical Skills										Diving 8, Perception 7, Swimming 6, Unarmed Combat 4
Matrix Skills										Computer 6, Cybercombat 5, Electronic Warfare 8, Hacking 5, Software 8
Complex Forms										Diffusion of Attack, Diffusion of Data Processing, Diffusion of Sleaze, Diffusion of Firewall, Editor, Infusion of Firewall, Pulse Storm, Resonance Channel, Resonance Spike, Resonance Veil, Static Bomb, Transcendent Grid
Powers										Armor (20), AR-Parallelism, Blend, Enhanced Senses (Sonar), Natural Weapon [Breach: DV (STR)P, AP +4], Resonance Feed, Toughness (10)

TECHNOSAPIENTS

Welcome to the part of this piece where I get to be the true master and G-Nome has to slide back into apprenticeship. Hunting in the virtual realm has several differences from hunting in the real world, namely speed, detection, tracking, and capture. Oh, wait, as I told G-Nome, everything is different here. When dealing with any of the technosapients, you have to realize you're operating in a virtual realm with no physical limitations, and most of these things consider our universal coding and design rules to be a ghost-damned joke. Sure, this lines them up in GOD's sights at times, but with the tricks and dodges most of these things can pull off, GOD isn't even a blip on their radar.

Just keep those four points in mind when hunting them. They're fast, so pushing your deck to the limits is your only hope. They aren't limited to running on devices, so you don't have a commcode to track or even any basic way to locate them. You want to find one, you gotta be close and know exactly what you're looking for or you're not finding squat. They don't leave an easy-to-follow trail. This isn't the woods with scat and broken branches, but the Matrix tracks everything, so if you know how to read the code, you can track down a denizen of the Matrix. Last, but certainly not least, capturing



them isn't just a matter of drugging them and tossing them in a cage. You need the tech and the savvy to get them cornered or drive them into an isolatable host or device and then time cutting them off perfectly. That's enough background conversation. Let's get to the bits and bytes of this, because more people have seen technosapient than even realize it, and they were in danger the entire time. They just got lucky.

G: As a general overview of the activities of this classification of creature, I can openly say they run the gambit. Many seek the solitary corners of the Matrix where they can be left alone, while others make moves to boost Matrix signals and gain territory, and even more act as forces of Matrix chaos. Every one of these new e-species should be studied with a scientific eye. We are seeing evolution occur at the speed of thought all around the world and shouldn't waste this opportunity by simply hunting these new beings or capturing them and sticking them in electronic boxes where nothing they do is natural. No one goes to the zoo to study how animals really act; they go for the spectacle of nature.

Take the group down in St. Louis that has been attracted to the new ARCHology. The rapid development of the hosts for the site and problems with maintaining security after repeated attacks and the collapse of NeoNET left it wide open for a variety of different protosapient species to arrive and settle. Currently, they are so settled and numerous, the site doesn't have the security to chase them off without a concerted effort that would, most certainly, damage the Matrix of the location as well. The locations they are settling into are great opportunities for study, but as with any wild study, great care needs to be taken to avoid disturbing their natural habits. You'll also want protections that will keep them from killing you in the process.

The last point I want to make before opening this up for T to describe those things we discovered is that all over the world, these Matrix creatures are attracted to "prey" in the big cities. The limited access and prohibitive costs of cyberdecks reduces the number of personas who have offensive capabilities against them, which means everyone and everything they can attack, they will. Everything is prey to them, and they have no aversion instincts yet. GOD is starting to contract jobs on them, but a serious initiative is being considered to open up more access to offensive Matrix devices, beyond the dongles we are currently getting.

POWER MUNGERS

At least we had a narrower area for hunting and looking for these things, but not as small as one might think, especially considering the number of homes with electrical generators and electric cars that produce power to attract these cord-nibblers. They don't actually nibble cords and don't gain any more or less "food" from larger or smaller sources, with the exception of large power plants, which usually have more files and other data for them to gobble up.

A power munger attack usually results in a blackout or brownout situation, as the files they eat aren't limited to boring employee datafiles—they also include operating system data, backups, maintenance schedules, and a myriad of other pieces that often disrupt and may redirect electrical power.

On the Matrix, the power mungers usually look like a sparking collection of wires, cords, panels, and old-time computer and energy tech. We've encountered them in humanoid shapes, a variety of different animals (four, six, and multi-legged), and as various geometric forms.

- I know at least one exec over at Gaeatronics who had a team snatch several of these. Whenever a plant with some reputation issues is about to get an audit, they usually have some kind of sudden data corruption, blamed on a protosapient AI. Total coincidence, I'm sure.
- Glitch

W	L	I	C	EDG	DEPTH
20	4	4	30	4	2
Core Condition Monitor					10
Matrix Skills					Computer 3, Cybercombat 5, Electronic Warfare 4, Hacking 4
Qualities					Inherent Program (Decryption), Munge, Real World Naïveté
Programs					Armor, Edit, Fork, Hammer, Mugger, Shredder

SENSE EATERS

The invention of cyberware has, over the course of the last several generations, virtually eradicated blindness and deafness in the modern world. There are occasionally cases of individuals who cannot or prefer not to have cyberware installed and remain without two of their primary senses, but most people with those sensory limitations get them remedied. This makes the attack of a





sense eater even more terrifying, because living without senses is so rare that we don't have well-established adaptations to these conditions. That means when a sense eater attacks, and it strips someone with cybereyes or cyberears of their senses, they tend to freak out. It's not like being in the dark or in a quiet place. It's an absence of the sense. It's gone. You can't even see the blackness surrounding you or hear the ambient hum of the world. Sense eaters take away our ability to interact with the world and put us in a spot where we lack some of the tools we rely upon for survival.

That description is the horror of them, but most of the time they simply go after sensory data files (sim, audio, video, etc.) or take over senseware and devices, such as cyberware and cameras. There may have even been instances where a sense eater was helpful, but most of the time in life, an abrupt loss of sensory data sucks.

The sense eaters we have seen are mosaic-covered humanoids. You can generally tell how old or well-fed one is by how small the mosaic pictures are. Some are small enough that they blend together like one of those mosaics where smaller images form a different larger one. Along with the images they also tend to have a cacophony traveling around with them. Sometimes subtle and oddly off-key, other times blaring like a jet engine.

G: I need to pop in here as the old guy and point something out that T never seems to understand. There is still a small section of the UCAS population, as well as several small groups in most of the planet's first world countries, that believe in Deaf culture. The capital D is intentional. They live in a world without sound, and none of them are any less for it. That's their culture. Yes, they have become smaller over the years as more kids reach an age at which they can decide they want to hear and cyberears are available. They're a vibrant people, and while Tech-splor-



er feels blindness and deafness have been eradicated, I think it's important to understand the people out there who have not given up their deafness just to fit in with a culture that isn't theirs.

- Thanks G. If you didn't say something, I would have. Evo accepts all kinds and they have one of the largest Deaf populations in the world. If you ever want a true and honest opinion about something, ask one of them. Which means there is a group of people with more innate resistance to a sense eater attack.
- Plan 9
- Can sense eaters be trained? Matt Wrath has a friend who wants to know.
- Matt Wrath
- Since they are relatively primitive creatures, quite possibly, but I don't know any protosapient trainers.
- Netcat
- You don't need to train them. Just box them up and then slip the box onto a host or near devices you want them to wreak havoc on.
- Clockwork

W	L	I	C	EDG	DEPTH
3	4	7	5	3	5
Core Condition Monitor		10			
Matrix Skills		Computer 4, Cybercombat 4, Electronic Warfare 6, Hacking 6			
Qualities		Inherent Program (Decryption), Munge, Real World Naïveté			
Programs		Armor, Cat's Paw, Edit, Exploit, Fnord, Fork, Sneak, Stealth			

GLITCHES

One thing that helps when you're hunting technomancers is regular and consistent focus on your job. Glean some rumors from the masses, dig a little deeper to uncover a kernel of truth, and then set out on a globe-trotting hunt. I've learned to value G-Nome's expertise with this end of the hunting process. Even though the Matrix is global, no one wants several thousand kilometers between them and a target in the modern Matrix. Signal degradation is huge and these things already have some major advantages on us—this is their turf, we just gain access through devices. Even if we don't need one—I can access the Matrix on my own, but I might use a cyberdeck when going after some of these things, just to put some protection between them and my brain.

All that said, glitches are slitches that deserve all the stitches. These damn things focus on bricking devices that connect to the Matrix. If it has a wireless connection, they are going after it. No big surprise there, but it's their style that gets me. They don't just slam it with code, they infuse it with errors until it pretty much bricks itself. The process is similar to the gradual process of tech getting out of date. Like the commlink you bought back in 2074 that runs okay, but it's lost a step or two over the years. Or the one you bought back in 2070 that doesn't even operate with the current system without a virtual machine between the two allowing code to be translated. The glitches expedite that slowdown process until the device just goes dark, gets stuck on the lock screen, or leaves you with the perpetual spinning beachball of doom!

All the glitches we have seen—a total of six—have had different appearances based on the devices they were trying to slowburn. Each appeared as an icon for the device, or matched the persona of the device's user, but they always appeared slightly fuzzy at the edges with lines of discoloration and disruption throughout. The appearance wasn't static, and they changed when they moved between devices. When not attached to a device, they formed into a single stream of rainbow code that shot out through the Matrix and moved on to their next target.

- After a bad flight, I did a little digging into the avionics system on our suborbital. The system was full of damaged code and operating errors. It also had an appearance like you described. I think a glitch was slowly damaging the craft, and I'm glad I got clear when I did.
- Puck

W	L	I	C	EDG	DEPTH
4	6	4	3	3	6
Core Condition Monitor		10			
Matrix Skills		Computer 6, Cybercombat 6, Electronic Warfare 5, Hacking 5			
Qualities		Corruptor, Easily Exploitable, Inherent Program (Crash), Munge, Real World Naïveté			
Programs		Armor, Exploit, Fork, Shredder, Stealth, Tantrum			

SIN EATERS

These were my favorites to chase after because of the amusement I got from watching people get



treated like dirt by security when their IDs didn't match up right. It was a tiny bit of gratification that the sheeple got a little wake-up call to what life without a SIN is like. The SIN eaters, as we call them, target identification data. Whether it's on a commlink as part of a fake or real SIN or located in a major database somewhere, they seek this data out and gobble it up. Their efforts burn fakes, create enough trouble that reals look fake, and occasionally manage to munge enough data on the same ID that it goes bye-bye and a former citizen is suddenly one of the SINless masses.

SIN eaters are the best dopplegangers in the Matrix. They can copy any other icon to near perfection and even steal some of their access in the process. They need to introduce a few marks and get to know an icon, but that's easy for them, since they usually look like another icon you know while they're marking you. After a copy is made, they often try to eliminate the original in order to avoid confusion, but not all the time. They know when the risk is greater than the reward.

G: Keep an eye out for these things near border crossings and other ID presentation hotspots. We found very few hanging around out in the barrens, while A-rated security zones were better spots, and the borders in Denver were the best.

- I recommend you send your hacker ahead to scope out a crossing just like you astrally recon spots with your spellslingers. If there's a SIN eater at a crossing, you'd best to find another route.
- Traveler Jones

W	L	I	C	EDG	DEPTH
3	4	4	5	3	6
Core Condition Monitor		10			
Matrix Skills		Computer 6, Cybercombat 4, Electronic Warfare 6, Hacking 6			
Qualities		Inherent Program (Edit), Munge, Real World Naïveté			
Programs		Redundancy, Snooper			
Notes		Armor, Encryption, Fork			
		Noisestorms travel in groups.			
		Each one covers a small area and targets devices and personas in its vicinity. Destroying one may clear an area or open it up for other noisestorms to move over.			

NOISESTORM

This was an odd one. The noisestorm appeared to have no other purpose than to float around in the Matrix and cover large swaths of Matrix terrain with a massive storm of noise. Every device in the area is affected—they can cover areas as small as fifty meters of real space all the way up to fuzzing

up entire grids. Even worse, a few have managed access to hosts, where they inflict the same phenomenon in a place that is usually free of most major noise. Efforts to attack the phenomenon have had varying results. Most report little damage to the noisestorm and no effect, but some reports indicate the noisestorm being chased off. The most common rumor is an increase in local effect after the noisestorm is attacked, as if it is retaliating for the attack.

G: It's hard to draw any real parallels across the realms of the Matrix and the astral, but noisestorms definitely appear to be similar in some ways to manastorms. There is no evidence to connect them directly, but I see them as parallel evolutionary paths, like the Tasmanian wolf and its European equivalent.

W	L	I	C	EDG	DEPTH
4	2	2	3	2	8
Core Condition Monitor		14			
Matrix Skills		Computer 3, Cybercombat 5, Electronic Warfare 4, Hacking 4			
Qualities		Inherent Program (Decryption), Munge, Real World Naïveté, Redundancy, Snooper			
Programs		Armor, Encryption, Fork			
Notes		Noisestorms travel in groups. Each one covers a small area and targets devices and personas in its vicinity. Destroying one may clear an area or open it up for other noisestorms to move over.			

XENOSAPIENTS

THE NULL FORMS

Thanks to Puck and his eye-opening view of something new and dark in the Matrix, G-Nome and I got heavily into looking for these interesting host-stealing creatures and the strange IC they seem to command. We thought maybe the IC was actually some form of generated protosapient. Simple and direct, but still not just a program. Our efforts landed us an interesting letter, one that talked all about this dark Matrix fear factory and the creepies it generated. The IC seems to be little more than a program kicked out by the Overseers—we'll talk about them in a minute—but he named other beings, and we managed to dig into those as well. G-Nome was not happy about this, as he felt this was stepping



beyond e-critter research and into the darker corners of twisted AIs and xenosapient intelligences, so most of this information is mine. He still looked over my data and analyzed it a bit, so I let him add a few lines here and there.

Overseers and three forms of IC were detailed in the *Dark Terrors* drop. The beings described here are the in-between forces and another top dog. Most aren't Overseer power level, but they aren't as dim as IC. They are used by Overseers and UNULLS, the other top dogs, to perform specific tasks. When not out and about, they can be found standing motionless in storage in the host of the Overseer to which they are aligned, which is almost as creepy as having them after you.

BLACK-OFF

Black-Off come with a preprogrammed message, usually something as simple as "back off," "let it rest," "dig no deeper," or something equally vague and cryptic. They deliver the warning once and then disappear. The second time someone sees a Black-Off, it's in attack mode. Black-Off gives no warning or preamble—it just leaps in to attack with slashing claws and gnashing teeth.

The Black-Off look like mouthy, creepy, humanoid things made of all black. They have extra-long arms and oversized mouths and teeth.

W	L	I	C	EDG	DEPTH
3	2	3	6	2	4
Core Condition Monitor			10		
Limits			Physical —, Mental 4, Social 7		
Matrix Initiative (no device)			6 + 4D6		
Matrix Initiative (w/device)			3 + Data Processing + 4D6		
Skills			Computer 2, Cybercombat 5, Electronic Warfare 3, Hacking 4, Intimidation 8		
Qualities			Bad Rep, Corruptor, Inherent Program (Decryption), Munge, Real World Naïveté		
Programs			Armor, Biofeedback, Cat's Paw, Fnord, Hammer, Sneak		

ROVERS

Rovers never say a word. Once assigned to a task, they locate their target, tag them with a Lingering Mark program, and then leave. The Lingering Mark program may not get erased with a reboot, so getting away ain't so easy. After a successful Linger-

ing Mark is laid, the Rover leaves the area. Their job is done—no sense in sticking around to risk attack or trouble. We believe this lingering mark is associated with both the Rover that laid it and a single Overseer or Null that assigned the Rover the task, offering insight, access, and additional connection to cause harm, for all elements involved.

Rovers look something like the Black-Off, but white, and they rarely open their mouths to show teeth. Their arms are even longer, and the mark they leave behind is always a distinct four-claw slash.

W	L	I	C	EDG	DEPTH
2	7	3	2	3	5
Core Condition Monitor			9		
Limits			Physical —, Mental 7, Social 4		
Matrix Initiative (no device)			6 + 4D6		
Matrix Initiative (w/device)			3 + Data Processing + 4D6		
Skills			Computer 2, Cybercombat 2, Electronic Warfare 8, Hacking 4		
Qualities			Bad Rep, Inherent Program (Exploit), Low Profile, Munge, Real World Naïveté		
Programs			Armor, Biofeedback, Cat's Paw, Fnord, Hammer, Sneak		

RED SPREAD

These things are collections of individuals, sometimes thousands in one form.

The Null Sect understands how reliant modern metahumans are on their technology, and one of the easiest ways to frustrate and frighten them is to take away their tech toys. Red Spread targets equipment and devices, laying marks for its Overseer as well as taking control of or destroying key pieces of equipment to make a point. They are notorious for using devices to draw attention to people exactly when they don't want attention. They are terrifying when they attack, as they look like parasitic worms peeling away from the main form and slipping into icons and personas.

Red Spread looks like a humanoid made of tiny strings, writhing at the ends and the surface. Each little string is actually a single red worm, and they burst apart to attack en masse when they find a suitable target.

G: The best way to fight Red Spread is run (my first choice) or fill the local Matrix with distortion and then run. Trying to attack each and every one of them is a futile effort. They are easily destroyed but also easily replenished.



W	L	I	C	EDG	DEPTH
4	5	3	3	2	6
Core Condition Monitor		11			
Limits		Physical —, Mental 6, Social 6			
Matrix Initiative (no device)		6 + 4D6			
Matrix Initiative (w/device)		3 + Data Processing + 4D6			
Skills		Computer 4, Cybercombat 6, Electronic Warfare 5, Hacking 6			
Qualities		Bad Rep, Inherent Program (Exploit), Low Profile, Munge, Real World Naïveté			
Programs		Authority, Armor, Biofeedback, Cat's Paw, Edit			

UN-GREY-TFUL

The Null version of Killer IC. They are intended to simply knock users out of the Matrix without causing serious injury. Primarily used to clear out witnesses from VR by attacking their devices, they are rarely singular and usually operate in groups, with numbers equal to about twice the number of devices in an area they may need to attack. Their grey trench coat appearance is reminiscent of some baseline commlink models as well as GOD's G-men, but they are remarkably boring when looked at closely.

- Had a run-in with a group of these in Atlanta. Had to call in reinforcements and still barely managed to deal with the four onsite, when I called in twice that number of friends.
- Slamm-0!
- You have eight friends?! I call bulldrek!
- Bull

W	L	I	C	EDG	DEPTH
2	7	2	1	3	6
Core Condition Monitor:		11			
Limits		Physical —, Mental 6, Social 6			
Matrix Initiative (no device)		6 + 4D6			
Matrix Initiative (w/device)		3 + Data Processing + 4D6			
Skills		Computer 2, Cybercombat 8, Electronic Warfare 3, Hacking 3			
Qualities		Bad Rep, Inherent Program (Hammer), Munge, Real World Naïveté			
Programs		Authority, Armor, Blackout, Cascade, Cat's Paw, Decryption, Fork, Mugger, Tantrum			

CLEAR-OUT

The invisible enemy. Clear-Out are stealth masters and exist to do nothing more than erase data. Usually traveling in large groups, Clear-Out gain access to their targets and then proceed to wipe them clean, erasing everything in their path. We found initial traces of them as part of data loss investigations and then did some extremely exciting (and by that, I mean boring as frag) stakeouts of places with potential info on the masters of this little e-cult. They are nearly impossible to detect, but once we had erasure events in progress, we jacked our perception enhancement programs into full gear and managed to spot the nearly clear humanoid outlines. They looked something like the Black-Offs, but transparent instead of black.

W	L	I	C	EDG	DEPTH
2	3	8	4	4	6
Core Condition Monitor		10			
Limits		Physical —, Mental 6, Social 6			
Matrix Initiative (no device)		16 + 4D6			
Matrix Initiative (w/device)		8 + Data Processing + 4D6			
Skills		Computer 8, Cybercombat 2, Electronic Warfare 2, Hacking 6			
Qualities		Bad Rep, Inherent Program (Edit), Low Profile, Munge, Real World Naïveté			
Programs		Armor, Fork, Sneak, Stealth			

OVERSEERS

These are the masters of the hosts that get seeded. They guide their lesser forms and corral the protosapient that are attracted to their seeded hosts and the vines. They are powerful foes in their own hosts and should not be taken lightly. With those brief statements made, I'll toss out an RIP Jiggy. The man brought skills to the party and helped G-Nome and I check out one of those vine-infested hosts (a former NeoNET lab host), but he got too excited and didn't know when it was best to run.

Overseers are said to take on a form with some relation to the host they seed. Unfortunately, I have only seen one myself, and while it fit that pattern, any other evidence I have of that pattern is anecdotal.



THE NULLS (GAMEMASTERS ONLY!)

The force behind it all, the mysterious beings known as the Null are the tools of the gamemaster. They appear as a slightly off version of whoever they are currently addressing, at least until they unleash their gaping-triangular-mouth visage. They only address what they consider complete personas, which includes deckers and technomancers, or anything that has all four of the Matrix Attributes (Attack, Sleaze, Data Processing, Firewall). The stats in the block below are for a Null that is not addressing anyone. When in the Matrix to confront someone or something, their attributes are mercurial, changing to nearly match their adversary as long as the adversary is operating in Hot Sim. This means their Matrix attributes are each one higher than their chosen adversary, and they change along with their opponent. This strange adaptation can easily be manipulated by someone choosing to run their deck at the lowest ratings to weaken the Null. They aren't fools, but they know they are essentially eternal and will gladly fall into the trap as all of their minions and resources target their weakened adversary. Their Depth rating is never less than 8.

Nulls are a step above the Overseers in power but operate parallel to them, with Overseers controlling individual hosts and Nulls going out to face individual problems.

W	L	I	C	EDG	DEPTH
7	6	7	4	4	8
Core Condition Monitor	13				
Limits	Physical —, Mental 7, Social 7				
Matrix Initiative (no device)	14 + 4D6				
Matrix Initiative (w/device)	7 + Data Processing + 4D6				
Skills	Computer 7, Con 5, Cybercombat 8, Electronic Warfare 6, Hacking 7, Intimidation 6, Software 5				
Qualities	Bad Rep, Inherent Program (Hammer), Low Profile, Munge, Real World Naïveté				
Programs	Authority, Armor, Biofeedback, Cascade, Cat's Paw, Decryption, Encryption, Fnord, Fork, Hammer, Mugger, Nyetworking, Psychotropic Biofeedback, Sneak, Tantrum				

W	L	I	C	EDG	DEPTH
4	5	3	3	2	6
Core Condition Monitor	11				
Limits	Physical —, Mental 6, Social 6				
Matrix Initiative (no device)	6 + 4D6				
Matrix Initiative (w/device)	3 + Data Processing + 4D6				
Skills	Computer 4, Con 4, Cybercombat 6, Electronic Warfare 5, Hacking 6, Intimidation 4, Software 4				
Qualities	Bad Rep, Inherent Program (Exploit), Low Profile, Munge, Real World Naïveté				
Programs	Authority, Armor, Biofeedback, Cat's Paw, Fnord, Hammer, Munge, Nyetworking, Psychotropic Biofeedback, Sneak				

THE NULLS

These guys are rumors. We looked, but got nothing in our search but anecdotes and stories of dead hackers. They're like the ultimate bogeyman of the Matrix, coming after hackers and showing them who the boss is. They're like the enforcers for this entire e-cult. I've got absolutely zero desire to ever actually run into one of them or have any interaction with them at all.

G: I am glad there is some wisdom in today's youth. Based solely on the rumors, the nulls are the apex predators of the Matrix. No one holds a candle to them—not the triumvirate, not GOD, not even the legendary Fastjack or Captain Chaos would have stepped into the Matrix ring and come out on top. If you find yourself persona to person with a null, make a call and hope your friends show up fast, because the only way you're going to win a fight like this is with pack tactics.



METASAPIENTS

I've only got three real AIs I can talk about with any accuracy. I know several others, but they're private or elusive about personal details. These three also relate to some other topics I've seen on the Matrix lately that could be very interesting for hackers, and even general Matrix-users around the world. I won't bore you with bio details about them. I'll get to the nitty-gritty and let you go out and meet them if you want.

AX S. GRANT

Ax is a Mr. J for Garmonbozia. He mostly hires for datasteals and AI saves, but sidelines with some money-making ops for corps with no interest in his patrons. The work nets him data on magic, cyber, social networking, and dozens of other topics that he enjoys learning about. Recently, his focus has been operations looking into the Singularity at Horizon and the intelligent software behind P2.0 systems. The social aspect of humanity intrigues him, and these particular subjects reveal the abundance of social dynamics that metahumanity can possess.

- I've met Grant before. He is also in charge of interviews for access to Garmonbozia along with hiring assets to delete rejections when they don't take it well.
- Netcat
- All that social software is part of that second process. Plenty of runners put on a smile and nod when they get refused but then get pissed at the rejection. Grant tracks their social circle and uses some solid bio-reading equipment to check the honesty of their acceptance. To gather the data, a runner team is often hired to get the subject talking about Garmonbozia, then other members of the team hit them with biodata readers. Relatively easy work if you've got a decent face, but sometimes dangerous when you run across someone who really wants to protect the Garmonbozia secret in order to gain more favor and maybe earn access.
- Balladeer
- I appreciate the importance of keeping Garmonbozia a secret, but they popped on and deleted files on JackPoint. That's fragging bogus and I'll continue to allow users to call it the G-Spot instead of its full name. "To protect their secret!"
- Bull

- They want to frag with us for helping them? Then forget about them. Simple.
- Hexatite
- Not everyone on JackPoint is a white hat. We should remember that.
- Kane

W	L	I	C	EDG	DEPTH
5	3	4	4	2	4
Core Condition Monitor					12
Matrix Skills					Computer 3, Con 6, Cybercombat 4, Electronic Warfare 4, Etiquette 6, Gunnery 2, Hacking 6, Intimidation 4, Negotiations 5, Software 3
Qualities					Codeslinger (Hack on the Fly), Inherent Program (Decryption), Linguist, Perceptive, Redundancy, Trustworthy
Programs					Armor, Cat's Paw, Edit, Encryption, Exploit, Fork, Guard, Hammer, Stealth

HITSEC BURN

Sometimes you gotta call a spade a spade. Hitsec Burn is a program so far beyond damaged that no one, not even his tragic inventor, would miss him if he were gone. Scouring the Matrix for info on this electronic assassin was tough, but everything I found just painted a blacker and blacker picture. Hitsec focuses on one thing and one thing only: eradicating and removing people from the Matrix, usually in a permanent fashion. As he also lacks any concept of morals or rules for his actions, removing a single hacker by burning down a building or crashing a suborbital isn't out of the question.

I would recommend that if you ever end up on Hitsec's list (and finding out that you're on the list is not that difficult, which is weird), you call in every data slicing master you can find and set a trap. It may not work—Hitsec is sly—but it's the best option for getting two desirable results, namely: you survive, and he doesn't. This thing needs to be erased.

Operationally, Hitsec has taken jobs all over the world. Recent operations have jumped across four continents and fourteen different grids over the span of only three days. It was an effort to clean up a line of hackers that had accessed a file from MCT. Whether this was contracted or personal, I don't know, though I lean toward the former with the megacorporate connection. The attacks covered a variety of styles includ-



ing hardware-bricking brain fries, car accidents, an elevator crash, an apartment fire, a pair of Black Hammer brain burns, and several other forms of apparent accidents. Everything was obviously linked to some form of Matrix malfunction and due to the variety, no one is looking for other connections. It doesn't help that there are some massive jurisdictional issues to looking at these cases as a group. The only group that could come down as universally affected is GOD, and since I've found several incidents where Hitsec was on their payroll, I don't think they're risking exposure to take out a lone assassin.

- Hitsec is a pro. Collateral damage is considered as part of the way he works. It doesn't make him any worse than half of us. In truth, with the kind of exposure and access Hitsec has managed, he might be a solid replacement here for Riser. He reminds me a lot of that drekbag, but that drekbag had a ton to teach the rest of us about surviving at any cost.
- Balladeer

W	L	I	C	EDG	DEPTH
6	4	7	5	4	9
Core Condition Monitor		14			
Matrix Skills		Computer 3, Con 8, Cybercombat 9, Electronic Warfare 4, Gunnery 8, Hacking 8, Intimidation 8, Pilot Aircraft 5, Pilot Ground Craft 5			
Qualities		Inherent Program (Decryption), Perceptive, Redundancy, Snooper			
Programs		Armor, Biofeedback, Blackout, Cascade, Cat's Paw, Decryption, Edit, Fork, Hammer, Mugger, Sneak, Stealth, Tantrum, Tarball			

DERRICK OWEN SLATTERY

Denver is doing some goofy stuff, and this guy is leading the charge. Currently a Denver native, he is operating at the forefront of collaborative efforts between Danielle de la Mar, Ghostwalker/Whitebird, and Erika to install the newest Matrix in Denver as a test city. Ghostwalker's recent power grab is offering the white worm a lot of leeway in how to run his city. Among his efforts is a change in the Matrix that could drastically change the life of hackers. Derrick is looking to help because he finds the increased security and limited access style for this next Matrix adjustment a definite improvement in the lives of Matrix denizens. According to some

pieces I listened to, he considers the current open Matrix akin to allowing anyone to walk into your home, but having locks on drawers or nailed-down furniture. He wants a Matrix that feels more like a home with a solid lock on the door, where once you are inside, things don't need to be locked down—not because they aren't valuable, but because anyone who would want to take them won't get access. Now, we all know that hackers will always find a way, but if access is more limited and direct, they won't be offered the full buffet.

Derrick focuses on the control and coordination aspect of these new systems and has a lot of big support with Ghostwalker and de la Mar. Those are big guns in the Sixth World, both carrying momentum from their successes, rather than fighting their way back from some loss of face or loss of standing.

- In the Denver shadows he goes by DOS and runs virtual meets for runners as a Mr. Johnson looking to sew a little virtual discord. Rumor is he's the one who engineered the animosity between the Nexus and JackPoint by setting up contract hits. The money behind them was never enough to get real pros interested, but it managed to drive some solid wedges between us.
- Ire
- Where'd you get that data?
- Glitch
- I've been playing this game a long time and I've been settled in Denver for a minute. I've got my finger on the pulse of the Free Zone at the moment, but it's beating fast and change is popping up at every turn. I love it!
- Ire

W	L	I	C	EDG	DEPTH
6	4	5	8	3	7
Core Condition Monitor		12			
Matrix Skills		Computer 6, Con 6, Cybercombat 4, Electronic Warfare 4, Etiquette 6, Gunnery 2, Hacking 4, Intimidation 6, Negotiation 8, Software 2			
Qualities		Codeslinger (Hack on the Fly), First Impression, Inherent Program (Decryption), Linguist, Perceptive, Redundancy, Trustworthy			
Programs		Armor, Cat's Paw, Decryption, Encryption, Exploit, Fnord, Fork, Guard, Sneak, Stealth			



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Street Lethal is for use with *Shadowrun, Fifth Edition*, though much of the information on corporate security and other opponents could also be used in *Shadowrun: Anarchy*.

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FIN

INFINITE FRONTIER

The Matrix is unknowable because it is infinite. There is always one more corner behind which things can hide, one more hole where secrets can be buried. Your job isn't to know everything about the Matrix—it's to know more than the people you are hunting. Or who are hunting you.

Kill Code will help give Sixth World hackers the edge they need to stay alive and get ahead. From a guide to Matrix basics and operations to more ways to build ace deckers to dozens of new options for technomancers, the book can help everyone who tries to make their living on the Matrix, providing something to give them an edge when riding the Matrix's datastreams. They'll also learn about who their opposition might be—and how they might be attacked. The Matrix is full of kill codes waiting to be executed. Just as with the Sixth World's many firearms, your job is to make sure they're pointed in the right direction when they go off.

Kill Code is an advanced Matrix sourcebook for use with **Shadowrun, Fifth Edition**.



SHADOWRUN FIFTH EDITION

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