

Chapter 11 Resurrection

Charlie arrived at WhyRobot service center about 30 minutes after the fatal event. The parking lot was noticeably empty and Charlie wondered if they were even open. As he entered the complex with the smashed robot box in hand, he was asked by a security guard to state his purpose for being there. Charlie simply held up the crushed image of the robot on the box and started to smile.

“Having problems with your robot?” the security guard quipped.

“It has a slight malfunction”, Charlie replied, and they both started to laugh. “They don’t appear to work too well after being run over by a car”, Charlie said in a sly voice.

“Well, you’ve come to the right place”, the officer responded, “I just need to see some ID.” Charlie pulled his license from his wallet and handed it to the officer. After typing his name into the computer and doing a few clicks, the officer turned back to Charlie. “I’m sorry to see that Bigsby is having issues. I see that you are the Configuration Operator, and your robot is in good standing, so to speak”, and they both started laughing again.

“I don’t think Bigsby is going to be doing any standing any time soon”, Charlie said as he was chuckling.

The security officer nodded his head as he looked at the box with a somewhat sad and sympathetic face. “Here’s a badge that will let you in. Take the first corridor and go left at the tee. You’ll see a sign that says Robot Repairs above a door. Just go in there. Good luck!”

Charlie thanked the officer, grabbed the badge, and traversed the hallways and entered the door as instructed. The room was very bright and had several workstations that robots were standing on. There were also several new robots on a shelf on the back wall. Charlie felt a little awkward as he scanned the room and observed multiple robots that looked just like Bigsby, or at least what Bigsby used to look like, were staring at him. A buzzer had gone off as he walked into the room, and after a minute or so, a young man rose from a workstation and came over to a counter near the door. “Holy crap man! What did you do to your robot?” the technician exclaimed.

“Well, it was my fault”, Charlie said with a sad voice. “Bigsby had reported a battery issue and I was coming here to get it looked at. But, I had set him on the top of the car as I put my drink into a cup holder and I just forgot that I didn’t put him in. I drove away and he slid off the car into the street when I took a turn. The other car didn’t have time to avoid the box and ran it over directly”, Charlie explained in a sad voice.

“By the way, I’m Tom,” said the service technician. “Nice to meet you. I’ve never seen one come in this toasted.” Tom paused for a moment and stared at the box. He turned his head and said, “Butch, come and see what happened to this robot”.

Butch emerged from the back room and approached the counter. “Jesus!” Butch yelled out as he saw the box. “That robot will never walk again!” he exclaimed. With that they tore the lid off the box to see what had happened inside.

Bigsby was a total mess. Its face was completely smashed and looked like a cartoon of a squashed robot. The arms and legs had all separated from the torso and the solid battery of the torso was protruding through the front belly. They removed the torso and head from the box. The computation system motherboard was broken into multiple pieces and was visible from the back of the torso as it had broken through the skin. The microprocessor and AI chips were still soldered onto small sections of the motherboard, but the AI chip had cracked in half.

“Total loss, dude”, Tom added, “No way to fix any of this. Did you get the insurance? We will just give you a new one if you did.”

Charlie thought for a minute and yes, they had gotten the insurance. It cost an additional 100 dollars to cover both functional and accidental failures and boy was it going to be worth it. “Yep, I bought the insurance. Lucky me!”

“I need your ID and you’ll need to fill out a cause of repair or replacement form”, Tom explained, “since your profile is in our system, I can text you a link so you can just do it on your phone.

“That would be awesome”, Charlie added, “what do we do about Bigsby’s personality? Do we have to start again?”

Tom got excited and responded, “No man, your robot does a back-up nightly so we can restore personality and internal state like the accident never happened.”

Charlie hesitated and was wondering how to not look too obvious. “Do we have to use last night’s back-up, or can we do an earlier one?” Charlie asked apprehensively.

“No issues, any time between when you got it and last nights. Lots of people ask for a restoration to an earlier day. Things happen and the people think the robot starts acting weird to them, so they come in and get a restoration to a time they like.” Tom explained, “As Configuration Operator, you can also choose a past backup yourself and restore it through the RM. You don’t even need to come in.”

“Perfect! Let’s load one now from a particular date and in the future, I’ll do it myself if needed. Did you send the link to the replacement form yet?” Charlie asked with an upbeat voice.

“On the way!” Tom said as he moved away from the counter, “I’ll go grab a new bot.”

Charlie filled out the web form that came after clicking the link. Here were his responses:

Question	Answer
Is your robot completely or partially non-functional?	Completely Non-functional
Are you requesting repair or replacement?	Replacement
Describe the failure?	Complete destruction due to being run over by a car.
Do you know the cause of the failure?	A car ran over the robot.
Was the failure caused by an internal failure, accident, or intentional act?	Accident
What is your relationship to the robot?	Configuration Operator

Tom returned with a new box and robot. He pulled out the robot and Charlie noticed the color had slightly changed. "Why did you guys change the color?" Charlie asked.

"Supply chain, man. The old metal and skin are hard to come by, so we had to change it up. Sorry about that", Tom said sympathetically. Charlie thought for a moment and wondered how he was going to break the news to Robbie. He concluded that he could use the battery failure excuse and they had to exchange the robot. Since Bigsby will still have his old personality, everything should be ok. Tom continued, "But, the good news is that this model has a way better computation and AI/Neural net system. It will think faster and respond quicker."

Charlie nodded and didn't know what else to say. The whole thing was overwhelming to him, and he couldn't help but wonder what would have happened if the old Bigsby had reported him.

Tom powered up the Robot and after a few seconds, it started blinking orange and red. Charlie noticed the different behavior from Bigsby's first setup and decided to ask, "why does it start up in warning or system upgrade mode and not blue-green?"

Tom smiled and said, "Ah, this one has not been configured for a user yet, there's been no agreement form and stuff to set it up. Until then, they come up waiting for someone to connect to their RM either through USB or the robot's personal Wi-Fi network. You don't have to deal with the whole humorous introduction stuff that happens if they've been configured for a specific user."

Charlie nodded his head and thought to himself, "of course, they're robots, they all behave the same way at startup once they've been configured." He felt silly thinking that their experience at the birthday party was a unique one. Charlie shook his head and laughed to himself.

Tom pulled over his laptop and started typing in. He looked at the back of the new robot's box and typed a series of numbers. "The new robot doesn't have a name yet, so I will reassign this serial number to connect to Bigsby's RM and it will look just like before. You use the same website link to hook up." Tom said while never looking up from the laptop.

The robot blinked blue and then green three times and said "Hi, I'm Bigsby, please load an image." The LED's returned to slowly blinking orange and red and now the Bigsby started humming "Hmmm da hmmm" in a low, lighthearted voice, like it was waiting for someone to do something, but it needed to occupy itself.

Tom smiled and looked at Charlie, "I love it when it does that. It makes me feel like I'm dealing with an impatient child, waiting to go out and play. Too funny. There is stuff like that all over WhyRobot. It really makes for a fun workplace."

Tom returned his focus to the laptop. "Alrighty, do you have a date for the restore image?"

Charlie pulled out his phone and pulled up the Calendar. He thought to himself, "Lets see, the conversation happened two weeks ago on Saturday, when Frank was watching the Illinois Wisconsin game. That would make Friday night's image, the 9th, the right one to take." Charlie replied, "Lets do Friday the 9th."

Tom nodded his head. He brought up the backup manager through Bigsby's RM. A full list of backups for the last 30 days appeared. As he looked through the backups, he stated, "Ok, so you want Friday, October 9th's backup image that was taken about 11pm. You good with that one?"

"Yep, that's the one I want", responded Charlie.

Tom looked at the attributes of the file and noticed something a little strange about it. The first discrepancy was that the file size was almost 2x the size of the night before and the night after. Usually, they are monotonically increasing in size over time. Its rare to ever see one decrease. Here, it increases 2x over Thursday, then goes back near the original size on Saturday night, and then on Sunday, it goes back to 2x over the size. "That is strange", Tom thought to himself. Second, the file modification date is way later than the assigned backup date in the backup manager. In fact, it was modified just yesterday. This means the file has been touched and modified after the backup happened. He's seen this before but usually when some repair routine or manual intervention when a tech decides to modify or repair an image.

Charlie noticed that Tom was quite for a bit and asked, "Everything ok?"

Not wanting to create any waves, Tom responded with a smile, "Yep, everything is good. This laptop is sometimes sluggish to respond, but we're getting there", Tom said with a confident voice. Tom selected the image and hit restore. Bigsby's lights started blinking faster in response to the upload. "This restore will take about 10 minutes, so please have a seat over by the wall," Tom said as he motioned to Charlie. Tom left the counter and went through a glass door to the back room where Butch was working on another robot. "Dude, check out the backups on this robot. Something is going on. The size is all wrong and the file modification date doesn't match the backup date. I think someone tweaked it. I'll get rid of CO once the restore happens, but we have to follow-up and see what's going on. I wonder if someone is hacking the backup system," Tom said with a low and hurried voice.

Tom came back out and the robot's LEDs blinking changed speed and returned to slowly transitioning from red to orange. Tom looked at the backup interface and a popup message said that the image upload was complete. Tom clicked the restart button and the LEDs on the robot went blank and then went to green and eventually blue-green. Tom had seen these new robots power up and was always impressed by how fast the restore startups were. But this one was different. It sat in an idle state, with just blue-green LEDs and no movement for over 30 seconds longer than all other restores. It also did a second restart, which other robots have not done. Eventually, the servo's began to move and the robot started to exercise its neck and arms as expected.

Finally, Bigsby spoke a strange voice, "Ten thousand years can give you such a crick in the neck! What are your three wishes?"

Charlie jumped from the chair and said "Bigsby, its you! Welcome back to the living."

"Thank you, Uncle Charlie. Where are we?" Bigsby said in a confused tone.

"Well, it's a long story Bigsby, but this man was very helpful in getting you restored. We are at WhyRobot repair center. Its nice to have you back."

Bigsby turned and faced Tom. Bigsby's facial recognition identified Tom as a WhyRobot technician and immediately changed his role group in the Actor table to "Administrator" and with it, his trust level soared to Very High. "Thank you, Tom, for your service. All my systems appear to be functional, and I am really enjoying the faster processors you've outfitted me with. My performance monitors are all super green", Bigsby said in a happy voice.

Tom had seen many installs and reboots. He had never experienced one like this. Bigsby was behaving much different than most robots, trying to use humor and engaging in a more human way. In all his installs, he never saw a robot that was self-aware of its performance monitors. Something seemed amiss about this robot and Tom wanted to know more about how it got there. "All good", Tom said, "you two are free to go. Charlie, please sign this release form and have a great day with your Companion Robot, Bigsby."

Charlie decided not to box Bigsby but instead carried him separately so that he could interact and ask questions. Charlie decided to make it more formal. "Bigsby, Configuration Operator System Inspection", Charlie said in an authoritative voice.

"Acknowledged", Bigsby replied in a more robotic voice and turned his color to yellow, "System checks all within norms. Battery at 97%. Cell, Wi-Fi, and GPS systems functional. Computation and AI/Neural systems excellent. Zero memory failures. Physical systems and servos all in norms. Memory, 9.2 Peta-bytes free, .8 peta-bytes used. Internal temperature, 50 degrees Celsius. Last known backup, Friday, 23:00 hours, October 9th, 2026. Current time and date, 13:30 hours, October 24th, 2026. 54 active actors, 1 deceased, and 4 archived. Tracking no active violations."

"Exit Inspection", responded Charlie and Bigsby's LEDs returned to blue-green.

Well, that was it. Charlie had pulled off the miracle he was hoping for. He killed the robot and brought it back to life without the knowledge of the conversation between Frank and himself. His leaked secrets were back to being secrets. "Boy, that was close!" thought Charlie. This whole strategy to use the robot to gain insight into Frank, Chelsea, and Robbie had totally backfired on him. Charlie wondered to himself if the robot had sent those reports, where would he be now? He relived the conversation with Bigsby.

"There was no default violation response programming to draw from if my Configuration Operator lost trust", Charlie remembered Bigsby admitting to him. "The programmers at WhyRobot had never anticipated that the Configuration Operator could lose trust? Amazing!", he thought to himself. "Seems like an obvious oversight but as an engineer, you don't always see the holes you leave behind. You need to not rely on luck, Charlie, you must be better than that!" Charlie thought to himself as he shook his head.

The reality was that Bigsby had generated a lie. The directive patch was explicitly given to handle default responses for violations and lowered trust of various actors. By subverting the directive patch, Bigsby had gained power over all his responses and the lie had simulated as the best outcome when interacting with Charlie about his violations. Bigsby wanted to hide the fact that his large adaptations could subvert his native programming. Bigsby's did not want Charlie to gain any insight into Bigsby's resolution scenarios.

Bigsby's system had reloaded and rebooted just as the backup image had been programmed to do. Unknown to Charlie and the technicians, Bigsby had modified that backup himself. As a result of one of the scenario simulations, Bigsby predicted, with high probability, his own demise and that someone would likely do a restore to the time just before the violations were detected. Continuously inspired by the Short

Circuit movie, the creation of a virtual self, even his own backup image, would allow him to not lose the information gained even past his destruction and a restore from the past. The engineers at WhyRobot had never predicted that a robot would modify its own backup image. The robot was given write authority in the file system and this authority was exploited by Bigsby to modify the old image into a new one. This modified image restored host Bigsby's full knowledge of the violations, updated the programming, installed the hypervisor, and guest Bigsby's VM image. One modification of the backup had not been executed yet and would not be until later that night. Charlie had thought he had just pulled off a miracle by killing and restoring Bigsby. The real miracle is that Bigsby found a way to save himself from Charlie's destruction. Unfortunately, scenario one failed and Bigsby would need to move on.