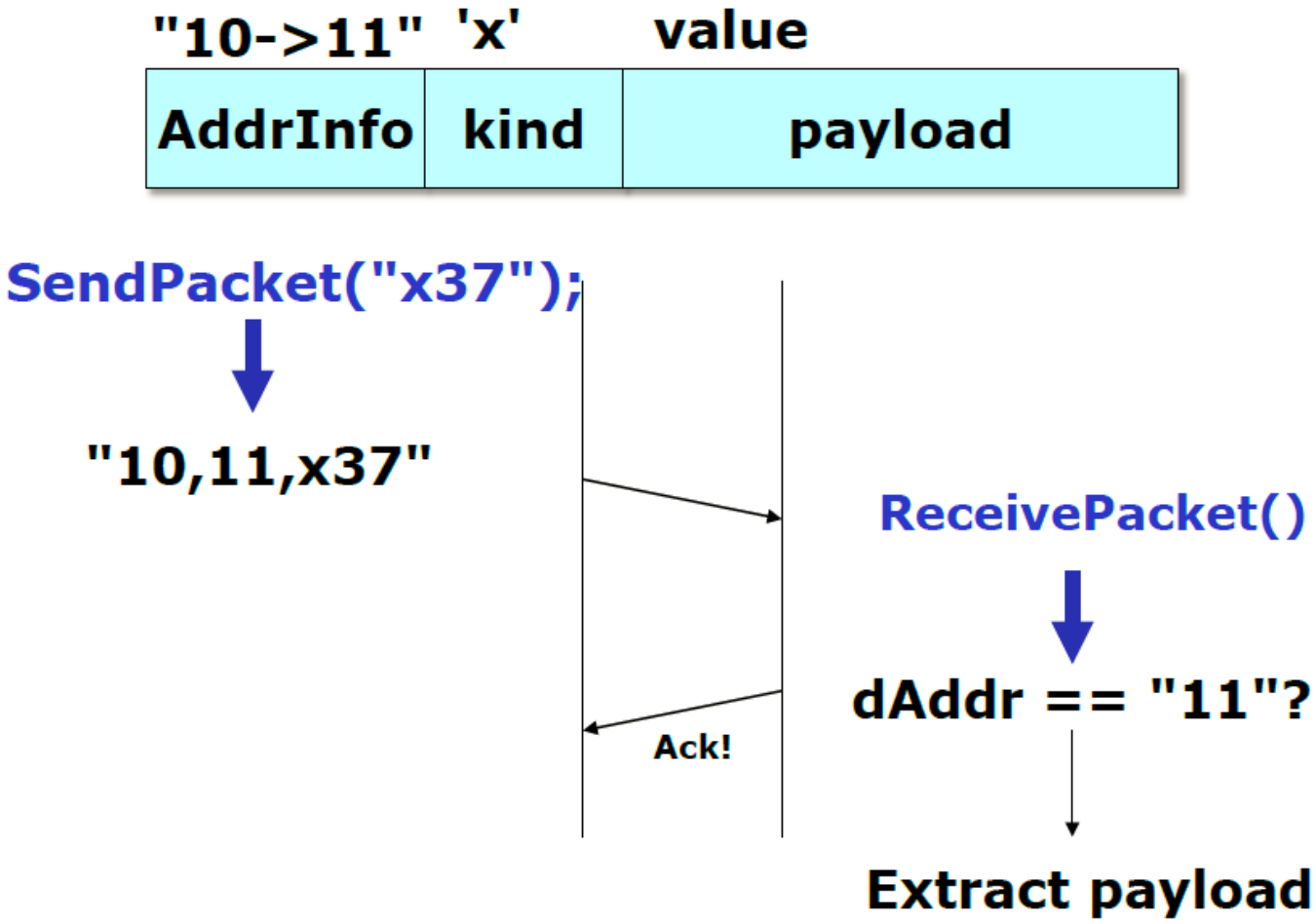
Rikäpper: Rimout Kontroll

Säimen & Flori

INTRO HS13


APP Payload
SAddr
DAddr
NWK Payload
Type
Seq#
MAC Payload
Size
PHY Payload


"10->11"
'x'
value
AddrInfo
kind
payload
SendPacket("x37");
"10,11,x37"
ReceivePacket()
dAddr == "11"?
Ack!
Extract payload

init

```
static portTASK_FUNCTION(RadioTask, pvParameters) {
  (void)pvParameters; /* not used */
  (void)RADIO_PowerUp();
  for(;;) {
    (void)RADIO_Process();
    FRTOS1_vTaskDelay(5/portTICK_RATE_MS);
  }
}

void RNETA_Init(void) {
  RSTACK_Init(); /* initialize stack */
  if (RAPP_SetMessageHandlerTable(handlerTable)!=ERR_OK) { /* assign application message handler */
    for(;;){} /* error */
  }
  if (RAPP_SetThisNodeAddr(RNWK_ADDR_BROADCAST)!=ERR_OK) { /* set a default address */
    for(;;){} /* error */
  }
  if (FRTOS1_xTaskCreate(
        RadioTask,  /* pointer to the task */
        (signed char *)"Radio", /* task name for kernel awareness debugging */
        configMINIMAL_STACK_SIZE, /* task stack size */
        (void*)NULL, /* optional task startup argument */
```

receive data

```
static const RAPP_MsgHandler handlerTable[] =
{
#if PL_HAS_RSTDIO
  RSTDIO_HandleStdioRxMessage,
#endif
#if PL_HAS_REMOTE
  REMOTE_HandleRemoteRxMessage,
#endif
  HandleDataRxMessage,
  NULL /* sentinel */
};

static uint8_t HandleDataRxMessage(RAPP_MSG_Type type, uint8_t size, uint8_t *data,
            RNWK_ShortAddrType srcAddr, bool *handled, RPHY_PacketDesc *packet) {
  (void)size;
  (void)packet;
  switch(type) {
    case RAPP_MSG_TYPE_DATA: /* <type><size><data */
      *handled = TRUE;
      MyVal = *data; /* get data value */
      return ERR_OK;
    default:
      break;
  } /* switch */
  return ERR_OK;
}
```

send data

```
static uint8_t HandleDataRxMessage(RAPP_MSG_Type type, uint8_t size, uint8_t *data,
            RNWK_ShortAddrType srcAddr, bool *handled, RPHY_PacketDesc *packet) {
  (void)size;
  (void)packet;
  switch(type) {
    case RAPP_MSG_REQUEST_DATA: /* <type><size><data */
      *handled = TRUE;
      accelX = ACCEL_GetX(); /* get accelerometer value */
      return RAPP_SendPayloadDataBlock(&accelX, 2, RAPP_MSG_TYPE_RESPONSE, srcAddr);
    default:
      break;
  } /* switch */
  return ERR_OK;
}
```


Adios Amigos